

REMEDIAL ACTION QUARTERLY MONITORING REPORT

FOURTH QUARTER – 2003 (2 of 120)

SKINNER LANDFILL SITE BUTLER COUNTY WEST CHESTER, OHIO

Prepared for:

Smar

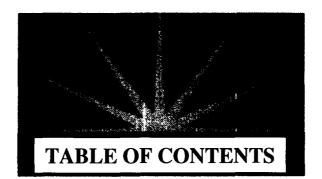
Jane !

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LIST OF ACRONYMS

AMP Air Monitoring Plan

AOC Administrative Order on Consent

ARAR Applicable or Relevant and Appropriate Requirements

BMR Baseline Monitor Report

BCDES Butler County Department of Environmental Services

bgs Below Ground Surface

BZ Breathing Zone

CD&D Construction Debris and Demolition Waste

CERCLA Comprehensive Environmental Response, Compensation and Liability

Act

CGI Combustible Gas Indicator

CHSD Corporate Health and Safety Director
CIP Construction Implementation Plan
CL.P Contract Laboratory Program
cm/sec Centimeters Per Second
CO Carbon Monoxide
CP Contingency Plan

CQA Construction Quality Assurance

COAC Construction Quality Assurance Consultant

CRZ Contamination Reduction Zone
CRQL Contract Required Quantitation Limit
CSDI Contaminated Soils Design Investigation

CY Cubic Yard CZ Control Zone

11.11

DSW Division of Surface Water (OEPA)
DSR Division Safety Representative
EPA Environmental Protection Agency

EZ Exclusion Zone

FID Flame Ionization Detector

FML Flexible Membrane Liner (low density polyethylene)

FSP Field Sampling Plan FIB Film Tearing Bond

ft Feet

ft/sec Feet Per Second

GCL Geosynthetic Clay Layer

GCAL Gulf Coast Analytical Laboratories Inc.
GIS Groundwater Interceptor System

gpd Gallons Per Day gpm Gallons Per Minute

GWDI Groundwater Design Investigation

HAP Hazardous Air Pollutant
HASP Health and Safety Plan
HIDPE High-Density Polyethylene
HSM Health and Safety Manager

IDLH Immediately Dangerous to Life or Health



IRM Interim Remedial Measures

kg/d Kilograms Per Day lb/day Pounds Per Day

LEL Lower Explosion Limit

LF Lineal Feet

LL.DPE Linear Low-Density Polyethylene

μ Micron

μg/l Microgram per Liter
MSL Mean Sea Level

NIOSH National Institute for Occupational Safety and Health

NO_x Oxides of Nitrogen

NWI National Wetland Inventory

 O_3 Ozone

OAC Ohio Administrative Code

ODNR Ohio Department of Natural Resources
OEPA Ohio Environmental Protection Agency

ORC Ohio Revised Code

OSHA Occupational Safety and Health Administration

PEL Permissible Exposure Limit
PID Photoionization Detector
PLC Programmable Logic Controller

PM-10 Particulate Matter less than 10 microns

PRP Potentially Responsible Party
PPE Personal Protective Equipment
psi Pounds Per Square Inch
PQL Practical Quantitation Limit
QAPP Quality Assurance Project Plan

QA Quality Assurance
QC Quality Control

RCRA Resource Conservation and Recovery Act

RA Remedial Action
RI) Remedial Design

RHSS Regional Health & Safety Specialist
RI/FS Remedial Investigation/Feasibility Study

ROD Record of Decision

RPM Remedial Project Manager (USEPA)

RPO Resident Project Observer

SI Site Inspection SF Square Feet

SLWG Skinner Landfill Work Group

SO₂ Sulfur Dioxide

SOP Standard Operating Procedure

SOW Statement of Work

SPCC Spill Prevention Control and Counter Measure Plan

SSO Site Safety Officer SVE Soil Vapor Extraction

SVOC Semi-Volatile Organic Compound

SZ Support Zone



WHIP!

TAL Target Analyte List
TCL Target Compound List
TDH Total Dynamic Head
TLV Threshold Limit Values
TSS Total Suspended Solids
TWA Time Weighted Average

USACE United States Army Corps of Engineers

USEPA United States Environmental Protection Agency

USFWS United States Fish and Wildlife Services

USGS United States Geological Survey VOC Volatile Organic Compound

yr Year

WBGT Wet Bulb Globe Temperature

WZ Work Zone



1.0 INTRODUCTION

1.1 GENERAL INFORMATION

This quarterly monitoring report was prepared for the Skinner Landfill Superfund Site located in West Chester, Butler County, Ohio in accordance with the Operation and Maintenance - Long-Term Performance Plan (O&M-LTP Plan) dated August 2003. The O&M-LTP Plan was prepared to meet the requirements of the Record of Decision (ROD) dated June 4, 1993, the Statement of Work (SOW) dated April 6, 1994, the 100% Final Remedial Design dated June 21, 1996 and the Consent Decree dated April 7, 2001.

The remedial action (RA) post-construction O&M monitoring period began with the third quarter of 2003 and extends for a period of 30 years. This report documents the results of groundwater and surface water monitoring conducted during the fourth quarter of 2003, which is the 2nd of 120 sampling events to be conducted during the 30-year monitoring period.

1.2 SITE LOCATION AND DESCRIPTION

Skinner Landfill is located approximately 15 miles north of Cincinnati, Ohio near West Chester, Butler Ccunty, Ohio in Township 3, Section 22, Range 2. The site is located along Cincinnati-Dayton Road, as shown in Figure 1. The site is bordered on the south by the East Fork of Mill Creek, on the north by wooded land, on the east by a Norfolk Southern Railway Company right-of-way, and on the west by a gravel driveway.

The site is located in a highly dissected area that slopes from a till-mantled-bedrock upland to a broad, flat-bottomed valley that is occupied by the main branch of Mill Creek. Elevations on the site range from a high of nearly 800 feet above mean sea level (MSL) in the northeast, to a low of 645 feet above MSL near the confluence of Skinner Creek and East Fork of Mill Creek. Both Skinner Creek and the East Fork of Mill Creek are small, intermittent shallow streams. Both of these streams flow to the southwest from the site toward the main branch of Mill Creek.

In general, the site is underlain by relatively thin glacial drift over inter-bedded shale and limestone of Ordovician age. The composition of the glacial drift ranges from intermixed silt, sand and gravel, to silty sandy clays with a thickness ranging from zero to over forty feet. The sand and gravel deposits comprise the hills and ridges and are encountered near the surface of the central portion of the site. The silts and clays usually occur as lenses in the sands and gravel or directly overlie bedrock.

1.3 SITE HISTORY AND BACKGROUND

The property was originally developed as a sand and gravel mining operation and was subsequently used as a landfill from 1934 to 1990. According to USEPA studies, materials deposited at the site include demolition debris, household refuse and a wide variety of chemical wastes. The waste disposal areas include a now buried former waste lagoon near the center of the site and a landfill. According to USEPA studies, the buried lagoon was used for the disposal of paint wastes, ink wastes, creosote, pesticides, and other chemical wastes. The landfill area, located north and northeast of the buried lagoon, received predominantly demolition and landscaping debris.

In 1976, the Ohio EPA (OEPA) initiated an investigation of the site. In 1982, the site was placed on the National Priority List by the USEPA based on information obtained during a limited investigation of the



site. A Phase II Remedial Investigation was conducted from 1989 to 1991 and involved further investigation of groundwater, surface water, soils and sediments. Both a Baseline Risk Assessment and Feasibility Study (FS) were completed in 1992.

The Phase II Remedial Investigation revealed that the most contaminated media at the site is the soil in the buried waste lagoon. Migration of the landfill constituents has been limited, and the Phase II Remedial Investigation concluded that there had been no off-site migration of landfill constituents via groundwater flow.

In the Record of Decision (ROD), dated June 4, 1993, the USEPA selected a remedy for the site consisting of multi-media capping of the landfill and the buried waste lagoon, and collection and treatment of the groundwater. The ROD also required an investigation to determine the feasibility for soil vapor extraction (SVE) in the granular soil adjacent to the buried lagoon.

The Remedial Design (RD) Investigation performed in 1994 was implemented to collect data required to assess the feasibility of the SVE and to design the multi-media cap and the groundwater extraction/treatment systems. The Remedial Design was submitted to USEPA on June 21, 1996 outlining the cover design and groundwater interception system design. Based on the RD investigation, the installation of an SVE system was determined to be unfeasible.

Construction of a groundwater interception system (GIS) and engineered landfill cover system began in April 2001 and was substantially completed in September 2001. The USEPA conducted the pre-final construction inspection on September 27, 2001, the final construction inspection on March 27, 2003 and the second 5-Year Review on January 22, 2004.

2.0 <u>SAMPLING METHODS</u>

This quarterly monitoring event was conducted in general accordance with the following documents shown with the date of the USEPA-approved final version:

- Operation and Maintenance Long-Term Performance Plan (O&M-LTP Plan) dated August 2003, and
- RA Health and Safety Plan, Final February 2001.

There were no deviations from these work plans.

3.0 RESULTS

3.1 GROUNDWATER LEVELS

The groundwater elevation data obtained from the monitor wells, piezometers and selected gas probes is presented on Table 1 with the corresponding potentiometric surface map provided in Appendix A. The groundwater flow direction and gradient remained relatively unchanged when compared to the previous quarterly monitoring report period. Groundwater flow direction is to the south-southeast directly toward the East Fork of Mill Creek with an average hydraulic gradient of 0.11 ft/ft. The groundwater gradient has remained relatively unchanged when compared to the average hydraulic gradient of 0.13 ft/ft documented in the Remedial Action Baseline Monitoring Report dated March 2005.



Name of Street

3.2 GROUNDWATER-WASTE MONITORING

Results of the piezometer groundwater levels used to monitor the groundwater levels relative to bottom of waste are provided on Table 2. Based on measured water levels, groundwater has been lowered below the waste elevation during this monitor event at piezometers P-11 and P-12, which are the two piezometers furthest from Duck Pond. The groundwater level remains above the bottom of waste at piezometer P-10. P-9 could not be measured due to an obstruction or possible pinching of the well material.

3.3 GROUNDWATER ANALYTICAL RESULTS

A summary of target compound list (TCL) and target analyte list (TAL) parameter concentrations encountered above the contract required detection limit and revised modified trigger level is provided on Table 3. A summary of the laboratory analytical results have been presented on a per well basis in Appendix B to assist in identifying temporal detection patterns. A report of each data set reduction, validation and assessment procedure conducted on an analytical-set basis in accordance with the O&M-LTP Plan quality assurance project plan (OAPP) is included in Appendix C.

In general, target compound list volatiles, semi-volatiles, pesticides and PCBs were not detected in groundwater above the CRQL.

Three of the 16 TAL parameters, with revised modified trigger levels, were detected above the CRQL. Detections of iron (present in seven groundwater monitoring wells), barium (present in four groundwater monitoring wells) and zinc (present in one groundwater monitoring well) were detected above the CRQL, but below the revised modified trigger levels.

3.4 SURFACE WATER ANALYTICAL RESULTS

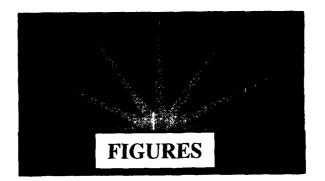
Surface water analyzed consisted of sampling surface runoff from the site and surface water directly from the East Fork of Mill Creek. A summary of TCL and TAL parameter concentrations encountered above the contract required detection limit and revised modified trigger level is provided on Table 4. A summary of surface water laboratory analytical results is presented in Appendix B. The summary tables are presented on a sample location basis. The validated laboratory analytical data is provided in Appendix C.

In general, target compound list volatiles, semi-volatiles, pesticides and PCBs were not detected in surface water above the CRQL.

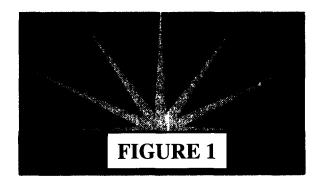
One of the 16 TAL parameters, with a revised modified trigger level, was detected above the CRQL. One surface-water runoff sample location contained a zinc concentration that exceeded the CRQL, as well as the associated revised modified trigger level.

Zinc has not previously been detected above the CRQL at the surface water run-off sample location; however, future sampling data will be evaluated for reoccurring trends.



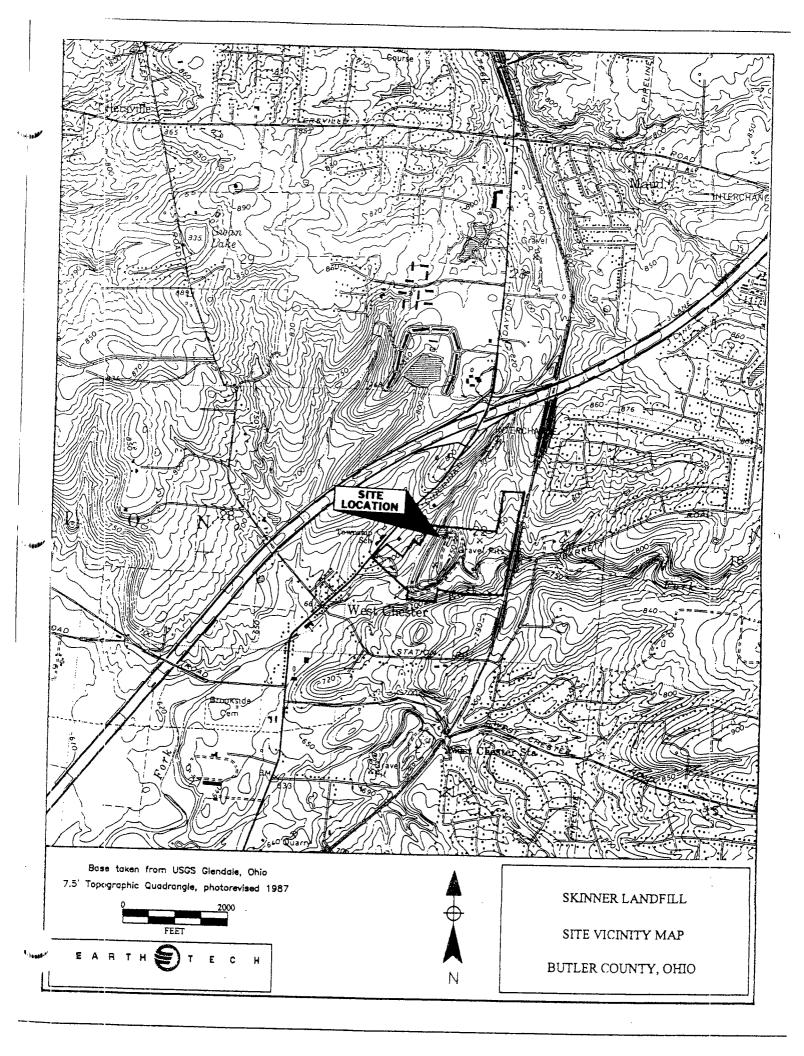


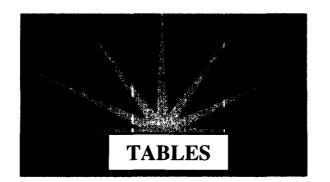




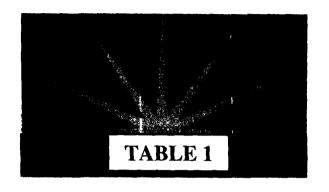
SITE VICINITY MAP











GROUNDWATER ELEVATIONS



TABLE 1

Groundwater Elevation Summary

Skinner Landfill West Chester, Ohio

					Novembe	r 2003
Well Type	Location	Well Use	Ground Surface Elevation (MSL-feet)	Top of Casing Elevation (MSL-feet)	Depth to Water (feet from top of casing)	Groundwater Elevation (MSL-feet)
	P-1	G	685.42	687.65	10.88	676.77
	P-2	G	688.54	690.42	13.11	677.31
	P-3R	G	691.83	693.69	24.95	668.74
ſ	P-4	G	700.32	702.63	8.05	694.58
	P-5	G	708.20	710.65	15.03	695.62
<i>p</i>	P-6	G	707.45	710.59	13.03	697.56
Piezometers	P-7	G	719.08	721,83	Dry	Dry
	P-8	G	747.70	749.91	29.93	719.98
	P-9	G	760.68	763,90	_	_
	P-10	G	761.34	764.16	25.00	739.16
	P-11	G	760.34	762.76	27.93	734.83
	P-12	G	743.50	746.17	40.78	705.39
	GW-06R	S	683.89	685,91	10.74	675.17
	GW-07R	s	683.46	683,06	6.40	676.66
	GW-24	s	693.32	695.21	17.78	677.43
	GW-26	s	696,61	698.28	29.84	668,44
	GW-30	s	675.63	677.62	9.88	667.74
	GW-58	S	684.03	686.53	13.59	672.94
	GW-59	s	684.35	687.38	7.10	680.28
Groundwater Monitoring Wells	GW-60	S	689.12	692.38	12.96	679.42
Monitoring wens	GW-61	S	687.38	690,86	12.91	677.95
	GW-62A	s	690.19	692.38	28.80	663.58
	GW-62B	s	690.57	693.13	Dry	Dry
	GW-63	s	698.87	702.50	11.15	691.35
	GW-64	s	700.45	703.88	13.68	690.20
	GW-65	s	703.83	706.88	16.89	689.99
	GW-66	G	686.82	689.41	7.88	681.53
Can Nahan	GP-6	G	772.18	774.65	17.03	757.62
Gas Probes	GP-7	G	749.83	752.65	Dry	Dry

Notes:

"Land"

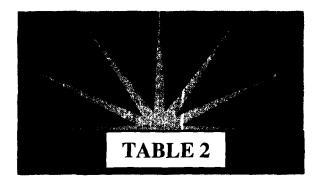
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MSL - Mean Sea Level

G - Gauging

S - Sampling and Gauging

No Gauging Data Available (well constricted)



GROUNDWATER/WASTE ELEVATIONS



TABLE 2

Groundwater-Waste Monitoring Summary

Skinner Landfill West Chester, Ohio

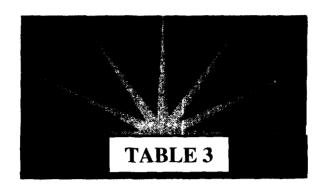
Piezometer	Depth to Waste (feet)	Bottom of Waste Elevation (MSL-feet)	Baseline Water Elevation (June 2001) (feet)	Water Elevation (February 2003) (feet)	Water Elevation (May 2003) (feet)	Water Elevation (August 2003) (feet)	Water Elevation (November 2003) (feet)
P-9	25	737	745.00	744.66	744.75	_	
P-10	30	734	744.50	743.66	744.71	738.46	739.16
P-11	17	745	744.30	733.12	734.82	735.74	734.83
P-12	35	707	713.50	705.84	705.83	705.42	705.39

Notes:

Waste elevations determined during piezometer installation on June 28 and 29, 2001. Shaded cells indicate water level elevations below the elevation of waste.

No Gauging Data Available (well constricted)





GROUNDWATER RESULTS SUMMARY



Table 3

Groundwater Summary

Skinner Landfill West Chester, Ohio Fourth Quarter 2003

Sample ID	VOCs	SVOCs	Dissolved Metals**	Pesticides/PCBs
GW-06R	-		barium	-
GW-07R		-	iron, zinc	-
GW-24	-	-	iron	-
GVV-26	-	-	barium, iron	-
GV-30	-	-	barium, iron	-
GV-58	-	-	barium, iron	-
G1V-59	-	-	-	-
GW-60	-	-	-	-
GW-61		-	iron	-
GW-62A	-	-	-	-
GW-62B	*	*	*	*
GW-63	-	-	iron	-
G\V-64	-	-	-	-
GNV-65	-	*	*	*

- all parameters below report limits

italic - above Contract Required Quantitation Levels (CRQL's)

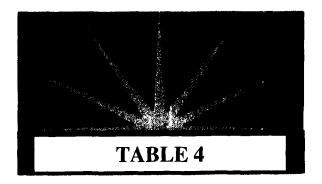
bold - above trigger level

· figage

441148

- * Insufficient sample volume.
- ** Dissolved metals for analytes that have a corresponding trigger level.





SURFACE WATER RESULTS SUMMARY



Table 4

Surface Water Summary

Skinner Landfill West Chester, Ohio Fourth Quarter 2003

Sample ID	VOCs	SVOCs	Dissolved Metals**	Pesticides/PCBs
SW-50	-	-	-	-
SW-51	-	-	-	-
SW-52	-	-	-	-
SWD-1	*	*	*	*
SWD-2	*	*	*	*
SWD-3	-	-	zinc	-

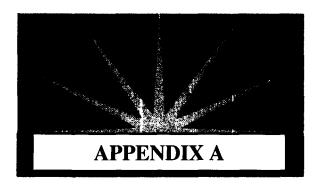
- all parameters below report limits

italic - above Contract Required Quantitation Levels (CRQL's)

bold - above trigger level

- * Insufficient sample volume.
- ** Dissolved metals for analytes that have a corresponding trigger level.



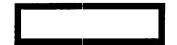


POTENTIONMETRIC SURFACE MAP



SDMS US EPA Region V

Imagery Insert Form



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SUMMARY OF ANALYTICAL RESULTS



Skinner Landfill West Chester, Ohio

Groundwater Analysis Summary Table for Monitoring Well GW-06R

	Sampling Event (All Results Expressed in Units of μg/l)								
			Baseline Results			Quarte	rly Results		
Compound	June-02	September-02	December-02	February-03	May-03	August-03	November-03	TRIGGER LEVEL	CRQL
norganics - Metals (Dissolved) ¹³									
duminum		_	_	_	_	_	25.8		200
antimony	6.3 B	13.3 B	6.0 B	3.0	7.0	3.7	3.7	60	60
Arsenic	8.3 B	8.1 B	3.6 U	3.6	2.9	2.9	2.9	20	10
arium	244	266	254	256	224	309 J	294	1,000	200
Seryllium	0.5 B	0.1 U	0.1 U	0.1	0.1	0.1	0.1	5	5
admium	0.2 U	0.2 U	0.2 U	0.2 UJ	0.2	0.2	0.2	5	5
alcium	_	_	_		_		189,000		5,000
Chromium	0.7 U	1.1 B	3.5 B	2.1	2.6	2.6	0.8	11	10
Cobalt	_	_	_	_	_	_	0.4		50
Copper	1.0 U	1.0 U	1.0 U	1.0 UJ	1.9	1.3	1.7	25	25
ron	79.8 B	92.2 B	4.9 U	79.2	14.1	14.1	14.1	7,000	100
ead	1.3 U	1.3 U	1.3 UJ	1.3 R	1.5 UJ	1.5	1.5	4.2	3
Magnesium	_	_	_	_	_		30,500		5,000
Manganese		_			_		77		15
Mercury	0.1 U	0.1 U	0.1 U	0.1 UJ	0.1	0.1	0.1	0.2	0.2
Nickel	0.5 U	3.6 B	1.6 B	1.8	1.8	1.7	1.8	96	40
Potassium	_	_	_	_	_	_	2,400		5,000
Selenium	11.0 J	8.5 J	4.0 U	4.0 R	4.4	4.4	4.4 R	8.5	5
Silver	4.5 B	1.9 B	5.5 B	0.5	0.4	0.4	0.4	10	10
Sodium	_	_	_	_	_	_	21,500		5,000
Thallium	9.0 J	3.7 B	3.6 UJ	3.6	2.6 UJ	2.6	2.6 UJ	40	10
/anadium	_	_	_	_	_	_	0.8		50
Linc	8.2 J	0.8 U	10.7 B	0.8 UJ	1.5	13.5	0.6 UJ	86	20
Inorganics - Metals and Cyanide									
Total)									
Aluminum	_	_		_	_		17,000 J		
Antimony	_	_	28.7 B	3.0	6.9	3.7	3.7		
rsenic	_	_	73.2	38.8	2.9	13.2	20.5		
ım	-	_	1,120	852	336	493	568		
yllium	-	_	3.3 B	2.5	0.1	0.3	1.2		
Cadmium	_	-	2.0 B	0.2 UJ	0.2	0.2	0.2		
Calcium		_	_				378,000		
Chromium	_		82.3	64.2	12.3	21.4 J	27.0		
Cobalt			_	_	_		24.1		
Copper	_	_	138	108 J	16.7	32.1	52.1		
Cyanide	4.0 U	4.0 U	4.0 UJ	4.0	3.0	3.0	3.0	10	10
ron	_	_	123,000	94,100	13,100	27,200 J	45,400		
ead	_	_	95.4 J	100 J	9.6 J	26.0 J	46.0		
Magnesium			_	_	_	_	115,000		
Manganese							2,940		
Mercury	_	_	0.2	0.2 J	0.1	0.1	0.1		
Nickel	-	_	114	88.2	14.1	26.0	41.2		
Potassium					-		5,050		
Selenium		_	65.7	4.0 R	4.4	4.4 R	4.4 UJ		
Silver			10.6	0.5	0.4	0.4	0.4		
Godium Thallium			26 III	401	26 111	26 111	22,100		
Vanadium	_		3.6 UJ	4.9 J	2.6 UJ	2.6 UJ	2.6		
Zinc			379	279 Ј	61.5	87.8 J	41.5 147 J		
Volatile Organic Compounds (VOCs)	BRL	BRL	BRL	BRL	BRL	BRL	BRL		
etrachloroethene		-				 	0.11 J	5	10
Semi-Volatile Organic Compounds								3	10
SVOCs)	BRL	BRL	BRL	BRL	BRL	BRL	BRL		
Bis (2-ethlyhexyl) phthalate	10.0 U	12.0 U	10.0 U	906	10.0 U	10.0 U	10.0 U	49	10
Pesticides / PCBs	BRL	BRL	BRL	BRL	BRL	BRL	BRL		
conclutes / I CDS	DICL	J.K.L	DICE	DKL.	DICL	J.K.L	DICE		

- 1) All results expressed in micrograms per liter ($\mu g/L$).
- 2) Standard Inorganic Data Qualifiers have been used.
- 3) Yellow shading indicate a detection above the Contract Required Quantitation Limit (CRQL) 4) Bold red letters with a thick outline indicates a detection above the Trigger Level.
- 5) BRL = Below Report Limít; reported data values have a data qualifier of U. J, or UJ
- 6) = Constituent not analyzed.
 7) U = Not detected at the listed reporting limit.
- 3) B = An estimated value above the method detection limit (MDL) or the instrument detection limit (IDL) but below the CRQL.
-) UJ = A value less than the CRQL but greater than the MDL.
- 10) J = The analyte was positively identified; the associated numerical value is the approximate concentration of analyte in the sample.

 11) R = The sample results are rejected due to deficiencies in the ability to analyze the sample and meet quality control criteria. The presence or absence of the analyte can not be verified.
- 12) CRQL = Contract Required Quantitation Limit
- 13) Samples analyzed for Dissolved Inorganics were field filtered using a 0.45 micron, gravity flow filter.
- 14) Detailed summary tables which list report limits and qualified data values for each compound analyzed for by the laboratory as well as qualified laboratory reports are available upon request.



		Sa	mpling Event (A	All Results Expres	sed in Units of	μg/l)		}	
			Baseline Results			Quarte	rly Results		
Compound	June-02	September-02	December-02	February-03	May-03	August-03	November-03	TRIGGER LEVEL	CRQL
Inorganics - Metals (Dissolved) ¹³			_						
Aluminum	_	_	_		_	_	25.8		200
Antimony	7.1 B	5.6 B	12.4 B	3.3	3.7	3.7	3.7	60	60
Arsenic	12.6	10.6	7.7 B	3.6	2.9	2.9	4.5	20	10
Barium	89.8 B	100 B	123 B	99.9	98.8	152 J	131	1,000	200
Beryllium	0.4 B	0.1 U	0.1 U	0.1	0.1	0.1	0.1	5	5
Cadmium	0.2 U	0.2 U	0.2 U	0.2 UJ	0.2	0.2	0.2	5	5
Calcium	-	-	_	0.2 0			229,000		5,000
Chromium	0.7 U	0.7 U	2.9 B	2.7	2.0	2.9	0.8	11	10
Cobalt	0.70	0.70	2.9 B				1.4	- 11	50
					_	-		25	
Copper	1.0 U	1.0 U	1.0 U	1.0 UJ	1.2	1.2	1.2	25	25
Iron	3,580	1,760	1,250	241	146	301 J	3,580	7,000	100
Lead	1.3 U	1.3 U	1.3 UJ	1.3 R	1.5 J	1.5	1.5	4.2	3
Magnesium	_				_		33,000		5,000
Manganese							849		15
Mercury	0.1 U	0.1 U	0.1 U	0.1 UJ	0.1	0.1	0.1	0.2	0.2
Nickel	0.9 B	3.1 B	1.9 B	3.4	3.2	2.4	1.6	96	40
Potassium	_	_	_	_	_	_	3,260	THE RESIDENCE OF	5,000
Selenium	11.0 J	11.3 J	4.0 U	4.0 R	4.4	4.4	4.4 R	8.5	5
Silver	4.4 B	0.9 B	4.7 B	0.5	0.4	0.4	0.4	10	10
Sodium	_	_		_			42,200		5,000
Thallium	15.8 J	10.5	3.6 UJ	3.6	2.6 J	2.6	2.6 UJ	40	10
Vanadium	15.6 3	10.5	3.0 0,1	3.0	2.0 3	2.0	0.8	40	50
Zinc	0.8 UJ	10.1 B	11.3 B	0.8 UJ	10.2	10,9	30.7 J	86	20
Inorganics - Metals and Cyanide (Total) Aluminum							3,130 J		
Antimony			14.2 B	3.0	3.7	3.7	3.7		
enic			9.8 B	3.6	2.9	14.6	5,3		
ium		_	9.8 B	260.0		699	204		
		-			132				
Beryllium Cadmium			0.2 B 0.2 U	0.1 0.2 UJ	0.1	0.3	0.1		
				0.2 03		-			
Calcium		-					246,000		
Chromium		-	19.3	9.1	3.7	21.5 J	4.9		
Cobalt							4.3		
Copper	_	-	21.8 B	8.2 J	4.2	30.4	10.0		
Cyanide	4.0 U	4.0 U	4.0 U	4.0	3.0	3.0	3.0	10	10
Iron		_	24,800	10,200	2,380	29,000 J	9,890		
Lead	_	_	9.1 J	1.3 R	1.5 UJ	16.8 J	5.2		
Mangesium	_	_	_			_	41,600		
Manganese		_	_				969		
Mercury		_	0.1 U	0.1 UJ	0.1	0.1	0.1		
Nickel	_	-	21.3 B	10.4	4.7	25.3	10.5		
Potassium	_	_	_	_	_	_	3,780		
Selenium	_	_	4.0 U	4.0 R	4.4	4.4 R	4.4 UJ		
Silver	_	_	5.2 B	0.5	0.4	0.4	0.4		
Sodium	_	_	_	_	_	_	41,200		
Thallium	_	_	3.6 UJ	3.6 UJ	2.6 UJ	2.6 UJ	2.6		
Vanadium	_	_	_	_	_	_	6.5		
Zinc		_	63.1	27.6 J	50.7	90.3 J	22.7 J		
Volatile Organic Compounds (VOCs)	BRL	BRL	BRL	BRL	BRL	BRL	BRL		
Semi-Volatile Organic Compounds (SVOCs)	BRL	BRL	BRL	BRL	BRL	BRL	BRL		
Pesticides / PCBs	BRL	BRL	BRL	BRL	BRL	BRL	BRL		

Notes:

- 1) All results expressed in micrograms per liter (µg/L).
- 2) Standard Inorganic Data Qualifiers have been used.
- 3) Yellow shading indicate a detection above the Contract Required Quantitation Limit (CRQL)
- 4) Bold red letters with a thick outline indicates a detection above the Trigger Level.
- 5) BRL = Below Report Limit; reported data values have a data qualifier of U. J, or UJ
- 6) = Constituent not analyzed.
- 7) U = Not detected at the listed reporting limit.
- 8) B = An estimated value above the method detection limit (MDL) or the instrument detection limit (IDL) but below the CRQL.
- 9) UJ = A value less than the CRQL but greater than the MDL.
- 0) J = The analyte was positively identified; the associated numerical value is the approximate concentration of analyte in the sample.
- 11) R = The sample results are rejected due to deficiencies in the ability to analyze the sample and meet quality control criteria. The presence or absence of the analyte can not be verified.
- 12) CRQL = Contract Required Quantitation Limit
- $13) \ Samples \ analyzed \ for \ \underline{Dissolved} \ Inorganics \ were \ field \ filtered \ using \ a \ 0.45 \ micron, \ gravity \ flow \ filter.$
- 14) Detailed summary tables which list report limits and qualified data values for each compound analyzed for by the laboratory as well as qualified laboratory reports are available upon request.



Sampling Event (All Results Expressed in Units of µg/l)	
Annual Paralta	

	Aliliuai Results		
Compound	November-03	TRIGGER	CRQL
Compound	Tioveniber 65	LEVEL	CNQL
norganics - Metals (Dissolved) ¹³			
Aluminum	25.8	And and the second	200
Antimony	3.7 U	60	60
arsenic	3.6 B	20	10
Barium	90.4 B	1,000	200
Beryllium	0.1 U	5	5
admium	0.2 U	5	5
adrium	111,000		5,000
Chromium	0.8 U	11	10
		- 11	50
Obalt	0.4		
Copper	2.1 B	25	25
ron	1,000	7,000	100
ead	1.5 U	4.2	3
fagnesium	26,400	A SECTION OF THE PARTY OF THE P	5,000
Manganese	169		15
Mercury	0.1 U	0.2	0.2
lickel	0.7 U	96	40
Potassium	3,210	Description of the Control of the Co	5,000
Selenium	4.4 U	8.5	5
ilver	0.4 U	10	10
odium	29,300		5,000
Thallium	2.6 U	40	10
Vanadium	0.9	40	50
inc	1.9 B	86	20
norganics - Metals and Cyanide (Total)	1.9 В	- 00	
Aluminum	13,000 J		
Antimony	3.7 U		
Arsenic	8.4 B		
Barium	162 B		
Beryllium	0.7 B		
Cadmium	0.2 U		
Calcium	544,000		
Chromium	19.5		
Cobalt	13.9		
	21.6 B		
Copper		10	10
Cyanide	3.0 U	10	10
ron	30,500		
ead	20.8		
Magnesium	73,800		
Manganese	1,960		
Mercury	0.1 U		
Nickel	28.2 B		
Otassium	6,610		
elenium	4.4 U		
Silver	0.4 U		
odium	31,500		
hallium	2.6 U		
/anadium	26.6		
Cinc	63.1		
Volatile Organic Compounds (VOCs)	BRL		
Semi-Volatile Organic Compounds (SVOCs)	BRL		
Pesticides / PCBs	BRL		

Notes:

- All results expressed in micrograms per liter (μg/L).
- Standard Inorganic Data Qualifiers have been used.
 Yellow shading indicate a detection above the Contract Required Quantitation Limit (CRQL)
- 4) Bold red letters with a thick outline indicates a detection above the Trigger Level.

- S) BRL = Below Report Limit; reported data values have a data qualifier of U. J, or UJ
 = Constituent not analyzed.

 10 U = Not detected at the listed reporting limit.
 8) B = An estimated value above the method detection limit (MDL) or the instrument detection limit (IDL) but below the CRQL.

- 9) UI = A value less than the CRQL but greater than the MDL.

 10) J = The analyte was positively identified; the associated numerical value is the approximate concentration of analyte in the sample.

 11) R = The sample results are rejected due to deficiencies in the ability to analyze the sample and meet quality control criteria. The presence or absence of the analyte can not be verified.

- 12) CRQL = Contract Required Quantitation Limit
 13) Samples analyzed for <u>Dissolved</u> Inorganics were field filtered using a 0.45 micron, gravity flow filter.
 14) Detailed summary tables which list report limits and qualified data values for each compound analyzed for by the laboratory as well as qualified laboratory reports are available upon request.

Sampling	Event (All Results	Expressed in Units of μg/l)
	Annual	Results

	Allitual Results		
Compound	November-03	TRIGGER LEVEL	CRQL
Inorganics - Metals (Dissolved) ¹³			
Aluminum	25.8		200
Antimony	4.1	60	60
Arsenic	5.9	20	10
Barium	344 J	1,000	200
Beryllium	0.1	5	5
Cadmium	0.2	5	5
Calcium	69,200		5,000
Chromium	0.8	11	10
Cobalt	1.0		50
Copper	2.0	25	25
Iron	442	7,000	100
Lead	1.5	4.2	3
Magnesium	38,500		5,000
Manganese	134		15
Mercury	0.1	0.2	0.2
Nickel		0,2	40
Potassium	1.7	96	5,000
Selenium	4.4 R	8.5	5
Silver	0.4	10	10
Sodium	187,000		5,000
Thallium	2.6 UJ	40	10
Vanadium	0.8		50
Zinc	0.6 UJ	86	20
Inorganics - Metals and Cyanide (Total)			
Aluminum	3,860 J		
Antimony	3.7 U		
Arsenic	2.9 B		
Barium	352		
Beryllium	0.2 B		
Cadmium	0.5 B		
Calcium	96,700		
Chromium	20.6		
Cobalt	5.8		
Copper	20.1 B		
Cyanide	3.0 U	10	10
fron	10,300	10	10
Lead	8.5	1 1	
	41,900		
Magnesium			
Manganese	320		
Mercury Nickel	0.1 U		
Potassium	16.8 B 19,100		
Selenium	19,100 4.4 UJ		
Silver	0.4 U		
Sodium	173,000	1	
Thallium	2.6 U		
Vanadium	2.2	- + - +	
Zinc	32.2	1 1	
Volatile Organic Compounds (VOCs)	BRL		
Semi-Volatile Organic Compounds			
(SVOCs)	BRL		
Pesticides / PCBs	BRL		

- All results expressed in micrograms per liter (μg/L).
 Standard Inorganic Data Qualifiers have been used.
- 3) Yellow shading indicate a detection above the Contract Required Quantitation Limit (CRQL)
 4) Bold red letters with a thick outline indicates a detection above the Trigger Level.
 5) BRL = Below Report Limit; reported data values have a data qualifier of U. J, or UJ

- 6) = Constituent not analyzed.
 7) U≈ Not detected at the listed reporting limit.

- 7) 0 ≥ Not detected a the isseet reporting limit.
 8) B ≈ An estimated value above the method detection limit (MDL) or the instrument detection limit (IDL) but below the CRQL.
 9) UJ = A value less than the CRQL but greater than the MDL.
 10) J ≈ The analyte was positively identified; the associated numerical value is the approximate concentration of analyte in the sample.
 11) R = The sample results are rejected due to deficiencies in the ability to analyze the sample and meet quality control criteria. The presence or absence of the analyte can not be verified.
 12) CRQL = Contract Required Quantitation Limit

- 13) Samples analyzed for <u>Dissolved</u> Inorganics were field filtered using a 0.45 micron, gravity flow filter.

 14) Detailed summary tables which list report limits and qualified data values for each compound analyzed for by the laboratory as well as qualified laboratory reports are available upon rec



	Sampling Event (All Results Expressed in Units of µg/l)		
	Annual Results		
Compound	November-03	TRIGGER LEVEL	CRQL
norganics - Metals (Dissolved) ¹³			
Aluminum	25.8		200
Antimony	3.7 U	60	60
Arsenic	2.9 U	20	10
Barium	334	1,000	200
Beryllium	0.1 U	5	5
Cadmium	0.2 U	5	5
Calcium	60,800		5,000
Chromium	0.8 U	11	10
Cobalt	0.4		50
Copper	5.4 B	25	25
ron	427	7,000	100
ead	1.5 U	4.2	3
Magnesium	28,900		5,000
Manganese	29.5		15
Mercury	0.1 U	0.2	0.2
Nickel	0.1 U	96	40
Potassium	12,600	20	5,000
Selenium	4.4 U	8.5	5
Silver	0.4 U		10
Sodium	146,000	10	5,000
		40	
Thallium	2.6 U	40	10
Vanadium	0.8	0/	50
Zinc Inorganics - Metals and Cyanide (Total)	0.6 U	86	20
Aluminum	516		
Antimony	3.7 U		
Arsenic	2.9 U		
Barium	318	-	
Beryllium	0.1 U		
Cadmium	0.2 B		
Calcium	61,000		
Chromium	6.0 B		
Cobalt	0.4		
Copper	8.4 B		
Cyanide	3.0 U	10	10
ron	2,090		
ead	1.5 U		
Magnesium	29,200		
Manganese	48.2		
Mercury	0.1 U		
Nickel	4.5 B	1	
Potassium	12,700		
Selenium	4.4 U		
Silver	0.4 U		
Sodium	145,000	1	
Thallium	2.6 U		
Vanadium	0.8		
Zinc	6.5 B	 	
Volatile Organic Compounds (VOCs)	BRL		
Semi-Volatile Organic Compounds (SVOCs)	BRL		

(SVOCs) Pesticides / PCBs

- All results expressed in micrograms per liter (μg/L).
 Standard Inorganic Data Qualifiers have been used.
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- 5) BRL = Below Report Limit; reported data values have a data qualifier of U. J, or UJ
- 6) = Constituent not analyzed.
- 7) U = Not detected at the listed reporting limit.
- 8) B = An estimated value above the method detection limit (MDL) or the instrument detection limit (IDL) but below the CRQL... 9) UJ = A value less than the CRQL but greater than the MDL..
- 10) J = The analyte was positively identified; the associated numerical value is the approximate concentration of analyte in the sample.
- 11) R = The sample results are rejected due to deficiencies in the ability to analyze the sample and meet quality control criteria. The presence or absence of the analyte can not be verified. 12) CRQL = Contract Required Quantitation Limit

- 12) CRQL = Contact Requires Quantitation Little
 13) Samples analyzed for Dissolved Inorganics were field filtered using a 0.45 micron, gravity flow filter.
 14) Detailed summary tables which list report limits and qualified data values for each compound analyzed for by the laboratory as well as qualified laboratory reports are available upon request.



			Baseline Results			Quarte	rly Results		
Compound	June-02	September-02	December-02	February-03	May-03	August-03	November-03	TRIGGER LEVEL	CRQL
Inorganics - Metals (Dissolved) ¹³									
Aluminum	_	T _	_	_		T -	25.8		200
Antimony	5.0 B	5.5 B	9.7 B	3.0	4.9	3.7	3.7	60	60
Arsenic	10.5	8.2 B	3.6 U	3.6	2.9	3.1	6.0	20	10
Barium	146 B	170 B	50.9 B	163	158	162 J	228	1,000	200
Beryllium	0.3 B	0.1 U	0.1 U	0.1	0.1	0.1	0.1	5	5
Cadmium	0.2 U	0.2 U	0.2 U	0.2 UJ	0.2	0.2	0.2	5	5
Calcium		_	_				96,400		5,000
Chromium	0.7 U	0.7 U	2.9 B	2.7	2.8	2.5	0.8	11	10
Cobalt	_	_	_	_	_	_	0.4		50
Copper	1.0 U	1.0 U	1.0 U	1.0 UJ	1.2	1.2	1.2	25	25
Iron	3,610	3,440	4.9 U	249	1,140	488 J	2,890	7,000	100
Lead	1.3 U	1.3 U	1.3 U	1.3 R	1.5 UJ	1.5	1.5	4.2	3
Magnesium	_	_	_	_	_	_	32,800	MARKET TO SEE	5,000
Manganese	-	_	_	_	_	_	354		15
Mercury	0.1 U	0.1 U	0.1 U	0.1 UJ	0.1	0.1	0.1	0.2	0.2
Nickel	2.7 B	2.6 B	1.7 B	2.2	2.4	1.2	1.3	96	40
Potassium		_				1	5,210		5,000
Selenium	4.0 U	4.0 UJ	4.0 UJ	4.0 R	4.4	4.4	4.4 R	8.5	5
Silver	3.4 B	0.5 U	4.1 B	0.5	0.4	0.4	0.4	10	10
Sodium		- 0.5 -		0.5	-		34,400		5,000
Thallium	14.3	6.3 B	3.6 U	3.6	2.6 UJ	2.6	2.6 UJ	40	10
Vanadium			J.0 0		2.0 03	2.0	0.8		50
Zinc	0.8 U	1.6 B	11.0 B	0.8 UJ	19.2	7.7	0.6 UJ	86	20
Inorganics - Metals and Cyanide	0.00	110 2	11.0 2	0.0 05	17.2	7.7	0.0 0.0	- 00	
(Total)									
Aluminum		T =	_				41,600		
Antimony		_	14.3 B	3.0	5.2	3.7	3.7		
Arsenic	_	_	17.5	17.1	3.2	20.6	32.9		
Barium	-	_	422	540	367.0	391	822		
Beryllium	-	_	1.0 B	1.3	0.3	0.7	2.9		
Cadmium	-	_	0.2 U	0.2 UJ	0.2	0.2	1.8		
Calcium	_	_	_	_	_	_	745,000		
Chromium			51.3	63.1	14.9	42.6 J	112		
Cobalt		_		_		-	57.2		
Copper		_	47.7	42.5 J	27.8	43.2	138		
Cyanide	4.0 U	4.0 U	4.0	4.0	3.0	3.0	3.0	10	10
Iron	_	_	54,500	61,900	17,000	40,800 J	129,000		
Lead	-	_	19.8 J	38.5 UJ	23.0 J	26.8 J	92.7		
Magnesium	-	_	_	_	_		148,000		
Manganese	-	_	_	_	_	_	4,200		
Mercury			0.1 U	0.1 UJ	0.1	0.1	0.1	-	
Nickel	-	_	56.2	66.5	20.1	50.6	124		
Potassium	_	_	_	_	_	I -	11,800		
Selenium		_	4.0 U	4.0 R	4.4	4.4 R	4.4 UJ		
Silver	-	_	5.9 B	0.5	0.4	0.4	1.6		
Sodium	-	_	_	_	_	_	36,900		
Thallium	-	_	3.6 UJ	3.6 UJ	2.6 UJ	2.6 UJ	2.6		
Vanadium	_	_	_	_	_		74.0		
Zinc	-	_	153	164 J	78.7	137 J	367 J		
Volatile Organic Compounds (VOCs)	BRL	BRL	BRL	BRL	BRL	BRL	BRL		
acetone						8.0	5.0 U		10
Semi-Volatile Organic Compounds (SVOCs)	BRL	BRL	BRL	BRL	BRL	BRL	BRL		
Pesticides / PCBs	BRL	BRL	BRL	BRL	BRL	BRL	BRL		

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- 2) Standard Inorganic Data Qualifiers have been used.
- 3) Yellow shading indicate a detection above the Contract Required Quantitation Limit (CRQL)
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- 6) = Constituent not analyzed.
- 7) U = Not detected at the listed reporting limit.

 8) B = An estimated value above the method detection limit (MDL) or the instrument detection limit (IDL) but below the CRQL.

 9) UJ = A value less than the CRQL but greater than the MDL.
- 10) J = The analyte was positively identified; the associated numerical value is the approximate concentration of analyte in the sample.

- 11) R = The sample results are rejected due to deficiencies in the ability to analyze the sample and meet quality control criteria. The presence or absence of the analyte can not be verified.

 12) CRQL = Contract Required Quantitation Limit

 13) Samples analyzed for <u>Dissolved Inorganics</u> were field filtered using a 0.45 micron, gravity flow filter.

 14) Detailed summary tables which list report limits and qualified data values for each compound analyzed for by the laboratory as well as qualified laboratory reports are available upon request.



	Sampling Event (All Results Expressed in Units of μg/l)									
				Baseline Results			Quarter	ly Results		
Compound	June-	02	September-02	December-02	February-03	May-03	August-03	November-03	TRIGGER LEVEL	CRQL
Inorganics - Metals (Dissolved) ¹³										
Aluminum	_		_	_		_	-	25.8		200
Antimony	7.1	В	9.9 B	13.1 B	3.0	8.0	7.2	6.5	60	60
Arsenic	14.0		13.0	5.9 B	3.6	2.9	2.9	2.9	20	10
Barium	112	В	142 B	65.6 B	35.7	37.2	38.1 J	40.7	1,000	200
Beryllium	0.4	В	0.1 U	0.1 U	0.1	0.1	0.1	0.1	5	5
Cadmium	0.2	U	0.2 U	0.2 U	0.2 UJ	0.2	0.2	0.2	5	5
Calcium			_	_			_	261,000		5,000
Chromium	4.1	В	9.6 B	4.6 B	4.9	4.4	3.3	0.8	11	10
Cobalt	_		_	_	_	_	_	0.4		50
Copper	3.4	В	2.2 B	1.0 U	1.0 UJ	3.5	3.0	4.0	25	25
Iron	3,360		4,900	4.9 U	591	14.1	14.1	14.1	7,000	100
Lead	1.3	U	1.5 B	1.3 UJ	1.3 R	1.5 UJ	1.5	1.5	4.2	3
Magnesium	_		_	_	_			59,500		5,000
Manganese								27.3		15
Mercury	0.1	U	0.1 U	0.1 U	0.1 UJ	0.1	0.1	0.1	0.2	0.2
Nickel	8.1	В	12.3 B	1.8 B	3.5	3.5	3.0	2.3	96	40
Potassium			_	_	_	_		29,800		5,000
Selenium	13.7 J		15.8 J	18.2	4.0 R	4.4	4.4	4.4 R	8.5	5
Silver	4.0	В	2.7 B	7.2 B	0.5	0.4	0.4	0.4	10	10
Sodium			_	_	_	_	_	186,000		5,000
Thallium	12.9	J	8.8 B	3.6 UJ	3.6 UJ	2.6 UJ	2.6	2.6 UJ	40	10
Vanadium			_	_		_	_	0.8		50
Zinc	18.2	J	7.9 B	7.2 B	0.8 J	1.2	18.4	0.6 UJ	86	20
Inorganics - Metals and Cyanide										
(Total)										
Aluminum	_			-				3,710 J		
Antimony	_			19.5 B	3.0	3.7	3.7	3.7		
Arsenic Barium				36.5	3.6	2.9	3.6	4.3		
Beryllium			_	215 1.9 B	202 0.1	55.2 0.1	62.1 0.1	0.1		
Cadmium	_		1 =	0.7 B	0.1 0.2 UJ	0.1	0.1	0.1		
Calcium	_		_	0.7 B	0.2 03	0.2	0.2	281,000		
Chromium		_	 	82.4	18.8	5.4	8.3 J	19.1		
Cobalt	_		_	02.4	10.0	3.4	0.5 1	7.4		
Copper	_		_	45.0	1.0 UJ	3.6	6.0	11.9		
Cyanide	4.0 U		4.0 U	4.0	4.0	3.0	3.0	3.0	10	10
Iron	-		_	79,700	9,810	1,390	2,240 J	12,900		
Lead	_		_	36.7 J	1.3 R	1.5 UJ	5.7 J	10.0		
Magnesium	_		_	_	_	_	_	62,400		
Manganese	_		_	_	_	_	_	923		
Mercury	_	_	_	0.1 B	0.1 UJ	0.1	0.1	0.1		
Nickel	_		_	77.2	16.0	4.8	6.5	20.0		
Potassium	_		_	_	_	_	-	31,900		
Selenium	_		_	21.6	4.0 R	4.4	4.4 R	4.4 UJ		
Silver	_		_	7.6 B	0.5	0.4	0.4	0.4		
Sodium	_		_		_	_	-	180,000		
Thallium	_		_	3.6 UJ	3.6 UJ	2.6 UJ	2.6 UJ	2.6		
Vanadium Zinc				220	1007	-	21.2.7	5.9		
Volatile Organic Compounds (VOCs)	BRL		BRL	BRL	18.9 J BRL	BRL	21.2 J BRL	36.3 J BRL		
1,1-Dichloroethane	DKI.		DKL	DAL	DAL	0.2 J	1.0 U	1.0 U		10
Semi-Volatile Organic Compounds	BRL		BRL	BRL	BRL	BRL	BRL	BRL		10
(SVOCs)	-		BKL		DKL	DKL	DKL	DKL		
Pesticides / PCBs	BRL	,	BRL	BRL	BRL	BRL	BRL	BRL		

- Notes: 1) All results expressed in micrograms per liter ($\mu g/L$).
 - 2) Standard Inorganic Data Qualifiers have been used.
 - 3) Yellow shading indicate a detection above the Contract Required Quantitation Limit (CRQL)
 4) Bold red letters with a thick outline indicates a detection above the Trigger Level.
 5) BRL = Below Report Limit; reported data values have a data qualifier of U. J, or UJ

 - 6) = Constituent not analyzed.
 7) U = Not detected at the listed reporting limit.
 - 8) B = An estimated value above the method detection limit (MDL) or the instrument detection limit (IDL) but below the CRQL.
 - 9) UJ = A value less than the CRQL but greater than the MDL.
- 10) J = The analyte was positively identified; the associated numerical value is the approximate concentration of analyte in the sample.

 11) <math>R = The sample results are rejected due to deficiencies in the ability to analyze the sample and meet quality control criteria. The presence or absence of the analyte can not be verified.
- 12) CRQL = Contract Required Quantitation Limit
- 13) Samples analyzed for <u>Dissolved</u> Inorganics were field filtered using a 0.45 micron, gravity flow filter.

 14) Detailed summary tables which list report limits and qualified data values for each compound analyzed for by the laboratory as well as qualified laboratory reports are available upon request.



			Baseline Results		Quarterly	Results			
Compound	June-02	September-02	December-02	February-03	May-03	August-03	November-03	TRIGGER LEVEL	CRQL
Inorganics - Metals (Dissolved) ¹³	Insufficient Volume	Insufficient Volume		Insufficient Volume	Insufficient Volume	Insufficient Volume			
Aluminum			_		_	_	25.8		200
Antimony	_	_	11.3 B	_	6.7	_	3.7	60	60
Arsenic	_	_	3.6 U	_	2.9	_	2.9	20	10
Barium	_	_	43 B	_	60.9	_	28.7	1,000	200
Beryllium	_	_	0.1 U	_	0.1	_	0.1	5	5
Cadmium	_	_	0.2 U	_	0.2	_	0.2	5	5
Calcium	_	_		_	-	_	100,000		5,000
Chromium			4.6 B		2.7		0.8	11	10
					2.1		0.4	- 11	50
Cobalt	_		1.0 U		3.0		4.2	25	25
Copper	_							7,000	100
ron			1.3 UJ		14.1	_	14.1	-1000	
ead			0.1 U		1.5 UJ		1.5	4.2	3
Magnesium				_	_		20,100		5,000
Manganese			_				2.4		15
Mercury	_	_	3.4 B		0.1	_	0.1	0.2	0.2
Nickel		_	13.3	_	1.1		0.7	96	40
Potassium	_	_		_	_	_	6,970		5,000
Selenium	_	_	5.8 B	_	4.4	_	4.4 R	8.5	5
Silver	_	_	3.6 UJ	_	0.4	_	0.4	10	10
Sodium	_	_	_	_	_	_	201,000		5,000
Thallium	_	_	10.4 B	_	2.6 UJ	_	2.6 UJ	40	10
Vanadium	_	_	_	_	_	_	0.8		50
Zinc	_	_	10.4 B	_	4.5	_	0.6 UJ	86	20
(Total) Aluminum Antimony	=		8.4 B		3.7	=	13,400 J 3.7		
Arsenic		_	5.7 B		2.9		11.7		
Barium			88.5 B		73.1		89.8		
Beryllium		_	0.1 U	_	0.1		0.9		
Cadmium			0.1 U		0.1		0.3		
ium		<u> </u>	0.2 0		0.2	<u>-</u>	158,000		
nium		_	7.3 B		10.9	-	33.2		
Conner			1011		7.5		16.6		
Copper			1.0 U		7.5		29.3	10	10
Cyanide	_		4.0 U	_	3.0	_	3.0	10	10
ron			2,780		7830		31,300		
Lead	_	_	1.3 UJ	_	1.5 UJ	_	28.2		
Magnesium			_				32,500		
Manganese		_			_	_	555		
Mercury		_	0.1 U	_	0.1	_	0.1		
Nickel			7.4 B		7.8	_	31.6		
Potassium					_	_	9,290		
Selenium			14.3		4.4		4.4 UJ		
Silver	_	_	5.0 B	_	0.4	_	0.4		
Sodium			_	_		_	212,000		
Thallium			3.6 UJ	_	2.6 UJ	_	2.6		
Vanadium			_	_	_	_	23.2		
Zinc			28.3		34.2		135 J		
Volatile Organic Compounds (VOCs)	BRL	BRL	BRL	BRL	BRL	BRL	BRL		
Semi-Volatile Organic Compounds (SVOCs)	BRL	_	BRL	BRL	BRL	-	BRL		
Pesticides / PCBs	_	_	BRL	_	BRL	_	BRL		

Notes

- All results expressed in micrograms per liter (µg/L).

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 2) Standard Inorganic Data Qualifiers have been used.
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 5) BRL = Below Report Limit; reported data values have a data qualifier of U. J, or UJ
 6) = Constituent not analyzed.
 7) U = Not detected at the listed reporting limit.
 8) B = An estimated value above the method detection limit (MDL) or the instrument detection limit (IDL) but below the CRQL.
 9) UJ = A value less than the CRQL but greater than the MDL.
 10) J = The analyte was positively identified; the associated numerical value is the approximate concentration of analyte in the sample.
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 12) CRQL = Contract Required Quantitation Limit
- 12) CRQL = Contract Required Quantitation Limit
- 13) Samples analyzed for <u>Dissolved</u> Inorganics were field filtered using a 0.45 micron, gravity flow filter.

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Compound			Baseline Results			Quarter	ly Results		
	June-02	September-02	December-02	February-03	May-03	August-03	November-03	TRIGGER LEVEL	CRQL
Inorganics - Metals (Dissolved) ¹³									
Aluminum	_	T -	_	_	_	_	25.8		200
Antimony	7.3 B	6.3 B	6.7 B	3.0	7.3	3.7	3.7	60	60
Arsenic	12.5	10.6	13.7	3.6	2.9	4.7	7.5	20	10
Barium	107 B	104 B	98.2 B	64.7	67.7	77.7 J	83.3	1,000	200
Beryllium	0.1 U	0.1 U	0.1 U	0.1	0.1	0.1	0.1	5	5
Cadmium	0.2 U	0.2 U	0.2 U	0.2 UJ	0.2	0.2	0.2	5	5
Calcium	_	_	_	_	_	_	191,000		5,000
Chromium	0.9 B	0.7 U	4.4 B	1.6	3.3	3.8	0.8	11	10
Cobalt	_	_	_	_	_	_	2.0		50
Copper	3.6 B	1.0 U	1.0 U	1.0 UJ	1.2	1.2	1.2	25	25
Iron	9,070	2,770	12,500	3,270	1,940	6,100 J	5,100	7,000	100
Lead	1.3 U	1.3 U	1.3 UJ	1.3 R	1.5 UJ	1.5	1.5	4.2	3
Magnesium	-	-	_	_	_	-	35,700	R. T. Control of the	5,000
Manganese	_	_	_	_	_		866		15
Mercury	0.1 U	0.1 U	0.1 U	0.1 UJ	0.1	0.1	0.1	0.2	0.2
Nickel	4.5 B	3.1 B	5.0 B	2.4	4.2	4.0	4.0	96	40
Potassium	4.5 B	3.1 B	5.0 B	-	4.2	4.0	10,100	70	5,000
Selenium	4.0 U	5.3 J	4.0 U	4.0 R	4.4	4.4	4.4 R	8.5	5
Silver	2.7 B					0.4	0.4	10	10
	2.7 B	0.7 B	3.4 B	0.5	0.4	0.4	28,300	10	
Sodium								40	5,000
Thallium	9.7 J	5.6 B	3.6 UJ	3.6	2.6 UJ	2.6	2.6 UJ	40	10
Vanadium		-	10.5 P	-			0.8	04	50
Zinc	12.9 J	4.1 B	18.5 B	0.8 UJ	7.4	13.1	4.8 J	86	20
Inorganics - Metals and Cyanide (Total)									
Aluminum		т					1,080		
Antimony	_		6.7 B	3.0	4.5	3.7	3.7		
Arsenic		_	13.7	3.6	3.2	17.9	3.7		
Barium	_	T =	98.2 B	84.4	69.5	202	91.3		
Beryllium	_	_	0.1 U	0.1	0.1	0.2	0.1		
Cadmium	_	_	0.1 U	0.2 UJ	0.2	0.2	0.1		
Calcium			0.2 0	0.2 03	0.2	0.2	190,000		
		+							_
Chromium	_		4.4 B	5.6	2.9	23.2 J	2.1		
Cobalt	-		1.0 U	1.0 UJ	1.2	28.2	3.3 4.2		
Copper	4.0 U	4.0 U	4.0 U	4.0			3.0	10	10
Cyanide		1	12,500		3.0 2,330	3.0	1	10	10
Iron Lead	_		12,500 1.3 UJ	8,720 1.3 R	2,330 1.5 UJ	33,400 J 19.7 J	8,640 1.6		_
Magnesium			1.5 03	1.5 K	1.5 05	19.7 3	37,500		
Manganese							922		
Mercury		+	0.1 U	0.1 UJ	0.1	0.1	0.1		
Nickel	_		5.0 B	6.6	4.1	29.5	7.6		
Potassium		T = =	5.0 B	0.0	4.1	47.3	9,430		
Selenium	=		4.0 U	4.0 R	4.4	4.4 R	9,430 4.4 UJ		
Silver	_	_	3.4 B	0.5	0.4	0.4	0.4		
Sodium	-		3,4 B	0.5	-	-	27,700		
Thallium	_	_	3.6 UJ	3.8 UJ	2.6 UJ	2.6 UJ	2.6		
Vanadium	_		J.0 03	J.0 UJ	2.0 03	2.0 03	0.8		
Zinc	_	_	18.5 B	9.9 J	18.3	96.7 J	13.8 J		
Volatile Organic Compounds (VOCs)	BRL	BRL	BRL	BRL	BRL	BRL	BRL		
Carbon disulfide	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.4	1.0 U		10
Semi-Volatile Organic Compounds	BRL	BRL	BRL	BRL	BRL	BRL	BRL		
(SVOCs) Bis (2-ethlyhexyl) phthalate	12.2 U	12.0 U	57.0 J	10.0 U	10.0 U	40.6	10.0 U	49	10
7				2010 0	10.00	10.0	10.00		10

Notes:

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 4) Bold red letters with a thick outline indicates a detection above the Trigger Level.
- 5) BRL = Below Report Limit; reported data values have a data qualifier of U. J, or UJ

- 6) ≈ Constituent not analyzed.
 7) U = Not detected at the listed reporting limit.
 8) B = An estimated value above the method detection limit (MDL) or the instrument detection limit (IDL) but below the CRQL.
- 9) UJ = A value less than the CRQL but greater than the MDL.
- 10) J = The analyte was positively identified; the associated numerical value is the approximate concentration of analyte in the sample.

 11) R = The sample results are rejected due to deficiencies in the ability to analyze the sample and meet quality control criteria. The presence or absence of the analyte can not be verified.
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- 13) Samples analyzed for <u>Dissolved</u> Inorganics were field filtered using a 0.45 micron, gravity flow filter.

 14) Detailed summary tables which list report limits and qualified data values for each compound analyzed for by the laboratory as well as qualified laboratory reports are available upon request.



Skinner Landfill West Chester, Ohio

Groundwater Analysis Summary Table for Monitoring Well GW-62A

			Baseline Results			Quarter	rly Results		
Compound	June-02	September-02	December-02	February-03	May-03	August-03	November-03	TRIGGER LEVEL	CRQL
Inorganics - Metals (Dissolved) ¹³		-							
Aluminum		_	_	_	_	_	25.8		200
Antimony	3.7 B	7.3 B	12.7 B	3.0	9.6	3.7	3.7	60	60
Arsenic	3.6 U	4.9 B	3.6 U	3.6	2.9	2.9	2.9	20	10
Barium	145 B	174 B	157 B	162	146	145 J	126	1,000	200
Beryllium	0.3 B	0.1 U	0.1 U	0.1	0.1	0.1	0.1	5	5
Cadmium	0.2 U	0.2 U	0.2 U	0.2 UJ	0.2	0.2	0.2	5	5
Calcium		_	_	_	_	_	123,000		5,000
Chromium	0.7 U	1.5 B	4.1 B	3.5	3.5	3.5	0.8	11	10
Cobalt	_	_	_	_	_	_	0.4		50
Copper	6.3 B	1.1 B	5.2 B	1.0 UJ	4.4	2.4	2.7	25	25
Iron	36.1 B	6.2 B	4.9 U	317	14.1	14.1	14.1	7,000	100
Lead	1.3 U	1.3 U	1.3 UJ	1.3 R	1.5 UJ	1.5	1.5	4.2	3
Mangesium	_	_	_	_	_	_	49,200	FEET BITT	5,000
Manganese		_			_		51.4		15
Mercury	0.1 U	0.1 UJ	0.1 U	0.1 UJ	0.1	0.1	0.1	0.2	0.2
Nickel	1.5 B	3.2 B	2.7 B	1.8	2.1	0.7	0.9	96	40
Potassium	_		_	_	_	_	10,800		5,000
Selenium	4.0 U	4.0 U	4.0 U	4.0 R	4.4	4.4	4.4 R	8.5	5
Silver	1.9 B	0.5 U	6.0 B	0.5	0.5	0.4	0.4	10	10
Sodium	- I.J D	- 0.5 0	- O.O D	-	-	0.4	120,000	10	5,000
Γhallium	5.1 J	7.9 B	3.6 UJ	3.6	2.6 UJ	2.6	2.6 UJ	40	10
Vanadium	5.1 J	7.9 B	3.6 03	5.0	2.6 03	2.0	0.8	40	50
Zinc	4.3 J	0.8 U	11.4 B	0.8 UJ	7.4	11.0	0.8 0.9 J	86	20
Inorganics - Metals and Cyanide	4.5 J	0.8 0	11.4 Б	0.8 03	7.4	11.0	0.9 J	00	20
(Total)									
Aluminum			_		_		24,100 J		
Antimony	_		18.4 B	3.0	4.7	3.7	3.7		
Arsenic			17.0	20.7	8.7	18.3	17.7		
irium			471	1,170	615	800	633		
eryllium		_	0.5 B	1.7	0.8	1.1	1.5		
Cadmium	===		0.3 B 0.2 U	0.2 UJ	0.8	0.2	1.1		
Calcium		_	0.2 0	0.2 03	0.2	0.2	618,000		
Chromium	-		38.6	85.5	49.3	68.6 J	49.5		
Cobalt			42.2	76 1 777	45.2	-	33.5		
Copper	-	-	42.3	76.1 UJ	45.2	68	72.8	10.0	10.0
Cyanide	4.0 U	4.0 U	4.0 U	4.0		3.0	3.0	10.0	10.0
Iron			34,000	85,100	51,500	65,400 J	60,800		
Lead			33.3 J	68.0 UJ	33.6 J	65.2 J	72.8		
Magnesium		_			_		137,000		
Manganese							3,380		
Mercury	-		0.1 U	0.1 UJ	0.1	0.1	0.1		
Nickel			38.1 B	86.4	53.4	75.7	64.3		
Potassium		_	_	_	_	_	15,100		
Selenium			13.7	4.0 R	4.4	4.4 R	4.4 UJ		
Silver	_		5.4 B	0.5	0.4	0.4	0.4		
Sodium	_						121,000		
Thallium	_	_	3.6 UJ	3.6 UJ	2.6 UJ	2.6 UJ	2.6		
Vanadium	_	_			_		40.5		
Zinc Volatile Organic Compounds (VOCs)	BRL	BRL	BRL	242 J BRL	179 BRL	234 J BRL	181 J BRL		
Semi-Volatile Organic Compounds	BRL	BRL	BRL	BRL	BRL	BRL	BRL		
(SVOCs) Pesticides / PCBs	_			BRL	BRL	BRL	BRL		
Pesticides / PU'Rs	BRL	BRL	BRL	BRI.	RRI	I KRI.	I BRI		

- 1) All results expressed in micrograms per liter ($\mu g/L$).
- 2) Standard Inorganic Data Qualifiers have been used.
- 3) Yellow shading indicate a detection above the Contract Required Quantitation Limit (CRQL)
- 4) Bold red letters with a thick outline indicates a detection above the Trigger Level.
- 5) BRL = Below Report Limit; reported data values have a data qualifier of U. J, or UJ

- 6) = Constituent not analyzed.
 7) U = Not detected at the listed reporting limit.
 8) B = An estimated value above the method detection limit (MDL) or the instrument detection limit (IDL) but below the CRQL.
- 9) UJ = A value less than the CRQL but greater than the MDL.
- 10) J = The analyte was positively identified; the associated numerical value is the approximate concentration of analyte in the sample.
- 11) R = The sample results are rejected due to deficiencies in the ability to analyze the sample and meet quality control criteria. The presence of the analyte can not be verified.
- 12) CRQL = Contract Required Quantitation Limit
- 13) Samples analyzed for Dissolved Inorganics were field filtered using a 0.45 micron, gravity flow filter.

 14) Detailed summary tables which list report limits and qualified data values for each compound analyzed for by the laboratory as well as qualified laboratory reports are available upon request.

				Sampling Event	All Results Expr	essed in Units of	μg/l)				
				Baseline Resu	lts			Quarter	ly Results		
Compound	October-01	March-02	June-02	September-02	December-02	February-03	May-03	August-03	November-03	TRIGGER LEVEL	CRQL
Inorganics - Metals (Dissolved) ¹³	Well is Dry	Well is Dry	Well is Dry	Well is Dry	Well is Dry	Well is Dry	Insufficient Volume	Well is Dry	Well is Dry		
Inorganics - Metals and Cyanide (Total)	-	_	_	-	-	-	_	_	-		
Volatile Organic Compounds (VOCs)	_	_	_	_	_	_	BRL	_	-		
Benzene	_		_	_	-	_	3.00			5	10.0
Semi-Volatile Organic Compounds (SVOCs)	_	-	-	-	-	-	BRL	-	-		
Bis (2-Chloroethyl) ether	_	_	_	_	_	_	24.5		-	13.6	10.0
Pesticides / PCBs	_	_	-	-	-	-	BRL	_	-		

- Notes:

 1) All results expressed in micrograms per liter (µg/L).
 2) Standard Inorganic Data Qualifiers have been used.
 3) Yellow shading indicate a detection above the Contract Required Quantitation Limit (CRQL)
 4) Bold red letters with a thick outline indicates a detection above the Trigger Level.
 5) BRL = Below Report Limit; reported data values have a data qualifier of U. J, or UJ
 6) = No Sample Available (Well Dry)
 7) U = Not detected at the listed reporting limit.
 8) B = An estimated value above the method detection limit (MDL) or the instrument detection limit (IDL) but below the CRQL.
 9) UJ = A value less than the CRQL but greater than the MDL.
 10) J = The analyte was positively identified; the associated numerical value is the approximate concentration of analyte in the sample.
 11) R = The sample results are rejected due to deficiencies in the ability to analyze the sample and meet quality control criteria. The presence or absence of the analyte can not be verified.
 12) CRQL = Contract Required Quantitation Limit
 13) Samples analyzed for <u>Dissolved</u> Inorganics were field filtered using a 0.45 micron, gravity flow filter.
 14) Detailed summary tables which list report limits and qualified data values for each compound analyzed for by the laboratory as well as qualified laboratory reports are available upon request.

Groundwater Analysis Summary Table for Monitoring Well GW-63

Г		Sa	ampling Event (A	ll Results Express	ed in Units of μ	g/I)			
			Baseline Results	Quarter	ly Results				
Compound	June-02	September-02	December-02	February-03	May-03	August-03	November-03	TRIGGER LEVEL	CRQL
Inorganics - Metals (Dissolved) ¹³									
Aluminum				_	_		25.8	The second second second	200
Antimony	9.2 B	11.4 B	13.8 B	3.0	8.9	7.1	3.7	60	60
Arsenic	18.3	15.9	9.5 B	3.6	2.9	2.9	5.4	20	10
Barium	76.7 B	97.5 B	76.2 B	72.2	50.1	58.8 J	68.6	1,000	200
Beryllium	0.2 B	0.1 U	0.1 U	0.1	0.1	0.1	0.1	5	5
Cadmium	0.2 U	0.2 U	0.2 U	0.2 UJ	0.2	0.2	0.2	5	5
Calcium		_	_		_		278,000		5,000
Chromium	0.7 U	1.2 B	3 B	3.6	3.4	3.2	0.8	11	10
Cobalt		_	_		_		4.1		50
Copper	1.0 U	1.0 U	1.0 U	1.0 UJ	1.2	1.2	1.2	25	25
ron	729	592	758	622	297	1,890 J	1,150	7,000	100
Lead	1.3 U	1.3 U	1.3 UJ	1.3 R	1.5 UJ	1.5	1.5	4,2	3
Magnesium		_					61,000		5,000
Manganese	011		- 0.1 II	0.1 III		- 01	2,600	0.2	0.2
Mercury	0.1 U	0.1 UJ	0.1 U	0.1 UJ	0.1	0.1	6.9	96	40
Nickel Potassium	9.8 B	12.8 B	7.4 B	6.6	5.9	8.3	11,600	90	5,000
Selenium	18,7	15.3	8.7	4.0 R	4.4	4.4	4.4 R	8.5	5
Silver	4.9 B	2.0 B	3.6 B	0.5	0.4	0.4	0.4 0.4	10	10
Sodium	ч.э Б	2.0 D	3.0 D	-	0.4	0,4	72,100	10	5,000
Γhallium	22.9 J	15.9	3.6 UJ	3.6	2.6 UJ	2.6	2.6 UJ	40	10
Vanadium		-	_	_	_		0.8		50
Zinc	0.8 UJ	0.8 U	7.8 B	0.8 UJ	12.9	10.8	3.7 J	86	20
Inorganics - Metals and Cyanide									
(Total)									
Aluminum	_			_	_	_	10,500 J		
Antimony		_	20.2 B	3.0	4.6	3.7	3.7		
enic			22.8	30.4	12.6	12.6	9.3		
um			234	390	178	217	147		
Codmium			1.0 B	2.3	0.9	0.9	0.6		
Cadmium		_	0.2 U	0.2 UJ	0.2	0.2	0.2		
Calcium						2617	465,000		
Chromium Cobalt			39.2	70.8	30.8	36.1 J	13.7		
Copper	<u>_</u>	<u> </u>	35.7	77.8 J	29.3	33.0	17.4		
Cyanide	4.0 U	4.0 U	4.0 U	4.0	3.0	3.0	3.0	10	10
Iron	_	-	55,500	109,000	44,100	53,900 J	25,800		
Lead	_	_	21.2 J	70.2 UJ	28.5 J	36 J	23.4		
Magnesium	_	_	_	_	_	_	96,100		
Manganese		_	_			_	4,090		
Mercury			0.1 U	0.1 UJ	0.1	0.1	0.1		
Nickel		_	56.6	104	47.5	59.6	31.0		
Potassium		_	_	_		_	13,500		
Selenium		_	27.8	4.0 R	4.4	4.4 R	4.4 UJ		
Silver		_	7.3 B	0.5	0.4	0,4	0.4		
Sodium Fhallium			3.6 U	3.6 UJ	2.6 UJ	2.6 UJ	73,600 2.6		
Vanadium		_	3.6 0	3.6 03	2.6 03	2.6 01	17.8		
Zinc			160	267 Ј	129	182 J	66.3 J		
Volatile Organic Compounds (VOCs)	BRL	BRL	BRL	BRL	BRL	BRL	BRL		
Acetone	5.0 U	5.0 U	5.0 R	5.0 U	78.0 J	5.0 U	5.0 U		10
Carbon disulfide	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.3	1.0 U		10
Semi-Volatile Organic Compounds (SVOCs)	BRL	BRL	BRL	BRL	BRL	BRL	BRL		
Pesticides / PCBs	BRL	BRL	BRL	BRL	BRL	BRL	BRL		

Notes:

- All results expressed in micrograms per liter (μg/L).
 Standard Inorganic Data Qualifiers have been used.
- 3) Yellow shading indicate a detection above the Contract Required Quantitation Limit (CRQL)
- 4) Bold red letters with a thick outline indicates a detection above the Trigger Level.
- 5) BRL = Below Report Limit; reported data values have a data qualifier of U. J, or UJ

- 6) = Constituent not analyzed.
 7) U = Not detected at the listed reporting limit.
 8) B = An estimated value above the method detection limit (MDL) or the instrument detection limit (IDL) but below the CRQL.
- 9) UJ = A value less than the CRQL but greater than the MDL.
- 10) J = The analyte was positively identified; the associated numerical value is the approximate concentration of analyte in the sample.
- 11) R = The sample results are rejected due to deficiencies in the ability to analyze the sample and meet quality control criteria. The presence or absence of the analyte can not be verified.
- 12) CRQL = Contract Required Quantitation Limit
- 13) Samples analyzed for <u>Dissolved</u> Inorganics were field filtered using a 0.45 micron, gravity flow filter.

 14) Detailed summary tables which list report limits and qualified data values for each compound analyzed for by the laboratory as well as qualified laboratory reports are available upon request.



Skinner Landfill West Chester, Ohio Groundwater Analysis Summary Table for Monitoring Well GW-64

		Sai	npling Event (Al	l Results Expres	sed in Units of	μg/l)			
		-	Baseline Results	Quarter	rly Results				
Compound	June-02	September-02	December-02	February-03	May-03	August-03	November-03	TRIGGER LEVEL	CRQL
Inorganics - Metals (Dissolved) ¹³									
Aluminum	_	_	_	_	_		25.8		200
Antimony	6.6 B	5.9 B	12.3 B	3.0	5.3	4.2	3.7	60	60
Arsenic	12.7	9.2 B	7.3 B	3.6	2.9	2.9	2.9	20	10
Barium	34.5 B	34.6 B	53.5 B	31.0	28.9	31.5 J	44.6	1,000	200
Beryllium	0.4 B	0.1 U	0.1 U	0.1	0.1	0.1	0.1	5	5
Cadmium	0.2 U	0.2 U	0.2 U	0.2 UJ	0.2	0.2	0.2	5	5
Calcium	_	_	_	_	_	_	185,000		5,000
Chromium	0.7 U	1.2 B	20.4	4.9	6.5	3.8	0.8	11	10
Cobalt	_	_	_	_	_	_	0.5		50
Copper	3.0 B	1.8 B	10.4 B	1.0 UJ	4.9	4.5	3.4	25	25
Iron	1,010	4.9 U	19,500	63.2 R	52.6	14	14.1	7,000	100
Lead	1.3 U	1.3 U	3.7 J	1.3 UJ	1.5 UJ	1.5	1.5	4.2	3
Magnesium	-	-	-	-	-		61,800		5,000
Manganese	_	_	_	_	_		292		15
Mercury	0.1 U	0.1 U	0.1 U	0.1	0.1	0.1	0.1	0.2	0.2
Nickel	14.0 B	10.9 B	33.6 B	12.8 R	13.4	9.4	5.2	96	40
Potassium	Т4.0 В	10.5 В	33.0 D	12.6 K	15.4	7.4	12,300	70	5,000
Selenium	15.1 J	6.6 J	4.6 B	4.0	4.4	4.4	4.4 R	8.5	5
Silver	4.6 B	0.8 B	5.7 B	0.5	0.4	0.4	0.4	10	10
Sodium	4.0 B	0.6 В	3.7 B	0.5	0.4	0.4	67,600	10	5,000
Thallium	11.1 J	3.9 B	3.6 UJ		2.6 UJ	-	2.6 UJ	40	10
Vanadium	11.1 J	3.9 B	3.0 UJ	3.6	2.6 UJ	2.6	0.8	40	50
	23.9 J	0.8 U	64.5	0.8 UJ	9.1	16.1	2.6 J	86	20
Zinc Inorganics - Metals and Cyanide	23.9 J	0.6 U	04.3	0.8 0.3	9.1	16.1	2.0 J	-00	20
(Total)									
Aluminum		_	_		_	T	18,700 J		
Antimony			12.3 B	3.0	5.6	3.7	3.7		
Arsenic			7.3 B	4.3	2.9	6.2	10.8		
Barium			53.5 B	59.5	47.9	58.3	95.9		
Beryllium			0.1 U	0.5	0.1	0.2	1.0		
Cadmium		-	0.1 U	0.2 UJ	0.1	0.2	0.2		
			0.2 0	0.2 03	0,2	0.2	311,000		
Calcium			20.4	22.0	14.0	20.4.7			
Chromium		_	20.4	22.9	14.8	22.4 J	29.4		
Cobalt		_	10 4 P	2.2 J	9.6	16.0	23.1 16.3		
Copper	4.0 U	4.0 U	10.4 B		the state of the s	16.0		10	10
Cyanide			4.0 U 19,500	4.0	3.0 14,700	3.0	3.0 42,900	10	10
Iron		-		25,900		24,300 J			
Lead	_	-	3.7 J	8.1 UJ	1.7 J	9.7 J	20.0		
Magnesium		-	_				77,300 2,390		
Manganese		_	0177	0.1.777	0.1	- 01			
Mercury		_	0.1 U	0.1 UJ	0.1	0.1	0.1		
Nickel Potassium	_	_	33.6 B	38.3	26.1	33.9	46.0 14,700		
Selenium		-		4.0 R	- 44		14,700 4.4 UJ		
Silver	_	_	4.6 B 5.7 B	0.5	4.4 0.4	4.4 R 0.4	0.4		
Sodium	_	_	5./ B	0.5	0.4	0.4	68,300		
Thallium		~	3.6 UJ	3.6 UJ	2.6 UJ	2.6 UJ	2.6		
Vanadium		_	3.0 03	3.0 UJ	2.0 03	2.0 UJ	27.3		
Zinc			64.5	51.3 J	69.1	73.6 J	114 J		
Volatile Organic Compounds (VOCs)	BRL	BRL	BRL	BRL	BRL	BRL	BRL		
Semi-Volatile Organic Compounds	BRL	BRL	BRL	BRL	BRL	BRL	BRL		
(SVOCs)	BKL	DKL	BKL	DKL	BKL	BKL	DKL		
Bis (2-ethlyhexyl) phthalate	10.0 U	12.0 U	10.0 U	10.0 U	10.0 U	10.0	10.0 U	49	10
Pesticides / PCBs	BRL	BRL	BRL	BRL	BRL	BRL	BRL		

- 1) All results expressed in micrograms per liter ($\mu g/L$).
- Standard Inorganic Data Qualifiers have been used.
 Yellow shading indicate a detection above the Contract Required Quantitation Limit (CRQL)
- 4) Bold red letters with a thick outline indicates a detection above the Trigger Level.
- 5) BRL = Below Report Limit; reported data values have a data qualifier of U. J, or UJ
- 6) = Constituent not analyzed.
 7) U = Not detected at the listed reporting limit.
- 8) B = An estimated value above the method detection limit (MDL) or the instrument detection limit (IDL) but below the CRQL.
 9) UJ = A value less than the CRQL but greater than the MDL.

- 10) J = The analyte was positively identified; the associated numerical value is the approximate concentration of analyte in the sample. 11) R = The sample results are rejected due to deficiencies in the ability to analyze the sample and meet quality control criteria. The presence or absence of the analyte can not be verified.
- 12) CRQL = Contract Required Quantitation Limit
- 13) Samples analyzed for <u>Dissolved</u> Inorganics were field filtered using a 0.45 micron, gravity flow filter.

 14) Detailed summary tables which list report limits and qualified data values for each compound analyzed for by the laboratory as well as qualified laboratory reports are available upon request.



Skinner Landfill West Chester, Ohio Groundwater Analysis Summary Table for Monitoring Well GW-65

			Sampling Event (All Results Express	ed in Units of µg/l)				
Compound	June-02	September-02	December-02	February-03	May-03	August-03	November-03	TRIGGER LEVEL	CRQL
Inorganics - Metals (Dissolved) ¹³	Insufficient Volume	Insufficient Volume	Insufficient Volume						
Antimony	_		_		_	_	_	60	60
Arsenic	_	_	_	~	_	_	_	20	10
Barium	_	_	_	~	_	_	_	1,000	200
Beryllium	_	_	_	-	_	_	_	5	5
Cadmium	_	_	_	~	_	_	_	5	5
Chromium								11	10
Copper	_	_	_	~	_	_	_	25	25
Iron	_	_	_	-	_	_	_	7,000	100
Lead	_	_	_	_	_	_	_	4.2	3
Mercury	_	_	_	-	_	_	_	0.2	0,2
Nickel								96	40
Selenium	_	_	_	_	_	_	_	8.5	5
Silver	_	_	_	-	_	_	_	10	10
Thallium	_	_	_	_	_	_	_	40	10
Zinc		_		_	_	_	_	86	20
Inorganics - Metals and Cyanide									
(Total)									
Antimony	_			_	_	_	_		
Arsenic	_	_	_	-	_	_	_		
Barium	_	_	_	-	_	_	_		
Beryllium	_	_	_	_	_	_	_		
Cadmium		_	_			_			
Chromium	_			_	_	_	_		
Copper	_	_	_	_	_	_	_		
Cyanide	_	_	_		_	_	_	10	10
Iron	_	_	_	-	_	_	_		
Lead		_	-	_					
Mercury	-	_	_	-	_	_	_		
Nickel	_	_	~	_	_	_	_		
Selenium	_	_	-	_		_			
Silver	_	_	_	_	_		_		
Thallium	_	_	-	_	_	_	_		
Zinc	_	_		_	_	_	_		
Volatile Organic Compounds (VOCs)	BRL	BRL	BRL	BRL	BRL	BRL	BRL		
Semi-Volatile Organic Compounds (SVOCs)	BRL	BRL	BRL	BRL	BRL	-	, –		
4-Nitrophenol	62.5 U	50.0 U	29.8 UJ	10.0 U	10.0 U			150	25
Bis (2-ethlyhexyl) phthalate	25.0 U	20.0 U	11.9 U	10.0 U	10.0 U	_	_	49	10
Pesticides / PCBs	_	_	~	_	-	_	_		

- In All results expressed in micrograms per liter (µg/L).

 2) Standard Inorganic Data Qualifiers have been used.

 3) Yellow shading indicate a detection above the Contract Required Quantitation Limit (CRQL)

 4) Bold red letters with a thick outline indicates a detection above the Trigger Level.

 5) BRL = Below Report Limit; reported data values have a data qualifier of U. J, or UJ

 6) = No Sample Available (Well Dry)

 7) U = Not detected at the listed reporting limit.

 8) B = An estimated value above the method detection limit (MDL) or the instrument detection limit (IDL) but below the CRQL.

 9) UJ = A value less than the CRQL but greater than the MDL.

 10) J = The analyte was positively identified; the associated numerical value is the approximate concentration of analyte in the sample.

 11) R = The sample results are rejected due to deficiencies in the ability to analyze the sample and meet quality control criteria. The presence or absence of the analyte can not be verified.

 12) CRQL = Contract Required Quantitation Limit

 13) Samples analyzed for Dissolved Inorganics were field filtered using a 0.45 micron, gravity flow filter.

 14) Detailed summary tables which list report limits and qualified data values for each compound analyzed for by the laboratory as well as qualified laboratory reports are available upon request.

Groundwater Analysis Summary Table for Creek Surface Water Sample Location SW-50

		San	npling Event (All	Results Expresse	ed in Units of μ	g/l)			
]	Baseline Results	Quarter	ly Results				
Compound	June-02	September-02	December-02	February-03	May-03	August-03	November-03	TRIGGER LEVEL	CRQL
norganics - Metals (Dissolved) ¹³						-			
Muminum	_	_	_	_		Γ –	25.8		200
Antimony	4.9 B	3.9 B	9.7 B	3.0 U	9.7 B	3.7	3.7	60	60
arsenic	8.3 B	3.6 U	3.6 U	3.6 U	3.6 U	7.1	2.9	20	10
Barium	48.3 B	69.3 B	50.9 B	57.7 B	50.9 B	55.2	40.0	1,000	200
Beryllium	0.5 B	0.1 U	0.1 U	0.1 U	0.1 U	0.1	0.1	5	5
Cadmium	0.2 U	0.2 U	0.2 U	0.2 UJ	0.2 U	0.2	0.2	5	5
Calcium	-	- 0.2 0	- 0.2 0	-	- U.Z. C	- 0.2	84,100		5,000
Chromium	0.7 U	0.7 U	2.9 B	2.1 B	2.9 B	1.8	0.8	11	10
Cobalt	0.7 0	0.70	2.9 B	2.1 B	2.9 B	1.6	0.5	11	50
	1.0 U	1.0 U	1.0 U	1.0 UJ	1.0 U	3.1	4.4	25	25
Copper	83.4 B	56.0 B	4.9 U	1.0 03	4.9 U	14.1	14.1	7,000	100
ron									3
ead Magnasium	1.3 U	1.3 U	1.3 U	1.3 R	1.3 U	1.5	1.5	4.2	5,000
Magnesium		_	_	_	-		23,400		
Manganese	-	-		-			3.8	0.5	15
Mercury	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1	0.1	0.2	0.2
Nickel	0.9 B	0.8 B	1.7 B	0.8 B	1.7 B	0.7	0.7	96	40
Potassium	_	_	_		_	_	3,840		5,000
Selenium	4.0 U	4.0 UJ	4.0 UJ	4.0 R	4.0 UJ	4.4	4.4 R	8.5	5
Silver	4.2 B	0.7 B	4.1 B	0.5 U	4.1 B	0.4	0.4	10	10
Sodium	_	_	_	_	_	_	32,100		5,000
Γhallium	9.1 J	4.0 B	3.6 U	4.3 J	3.6 U	6.8 J	2.6	40	10
Vanadium	_	_	_	_	_	_	0.8		50
Zinc	36.2 J	1.3 B	11.0 B	0.8 UJ	11.0 B	13.8	0.6 UJ	86	20
norganics - Metals and Cyanide									
Total)									
Aluminum	_	_	_	_	_		25.8		
rsenic	_	_	3.6 U	3.6 U	3.6 U	2.9	3.4		
rium	_	_	50.7 B	58.1 B	50.7 B	55.4	41.3		
eryllium	_	_	0.1 U	0.1 U	0.1 U	0.1	0.1		
Cadmium	_	_	0.2 U	0.2 UJ	0.2 U	0.2	0.2		
Calcium	_	_	_		_	_	86,400		
Chromium			3.2 B	2.3 B	3.2 B	1.7	0.8		
Cobalt	_	_	_		_		0.4		
Copper	_	_	4.4 B	5.7 J	4.4 B	2.5	4.4		
Cyanide	4.0 U	4.0 U	4.0 U	4.0 U	4.0 U	3.0	3.0	10	10
ron		-	4.9 U	141	4.9 U	23.5	69.2		
Lead	_	T =	1.3 U	1.3 R	1.3 U	1.5	1.5		
Magnesium	_	_	-	- I.J K	-	-	23,900		
Manganese		<u> </u>				 	5.8		
Mercury		+	0.1 U			0.1	0.1		
Nickel	_		1.3 B	0.1 U 0.5 U	0.1 U	1.5	0.1		
Potassium	===		1.5 D	0.5 0	1.3 B	1.3	3,990		
Selenium			4.0 U	4.0 R	4.0 U	4.4 UJ	3,990 4.4 R		
Silver		 	4.0 U	0.5 U	4.0 U 4.3 B	0.4	0.4		
Sodium			4.3 D	0.5 0	4.3 B	0.4	33,000		
Challium Challium	_		3.6 UJ	3.6 UJ	3.6 UJ	5.5 J	2.6		
√anadium		t =	3.0 03	3.0 03	- S.O OJ	3.3 7	0.8		
Zinc		<u> </u>	13.1 B	2.0 Ј	13.1 B	10.9	1.3 J		
Volatile Organic Compounds (VOCs)	BRL	BRL	BRL	BRL	BRL	BRL	BRL		
Semi-Volatile Organic Compounds SVOCs)	BRL	BRL	BRL	BRL	BRL	BRL	BRL		
Diethylphthalate							2.17 J		10
Demyphinalate						-			

Notes:

- All results expressed in micrograms per liter (μg/L).
- 2) Standard Inorganic Data Qualifiers have been used.
- 3) Yellow shading indicate a detection above the Contract Required Quantitation Limit (CRQL)
- 4) Bold red letters with a thick outline indicates a detection above the Trigger Level.
- 5) BRL = Below Report Limit; reported data values have a data qualifier of U. J, or UJ
- 6) = Constituent not analyzed.
- 7) U = Not detected at the listed reporting limit.
- 8) B = An estimated value above the method detection limit (MDL) or the instrument detection limit (IDL) but below the CRQL.
- 9) UJ = A value less than the CRQL but greater than the MDL.
- 10) J = The analyte was positively identified; the associated numerical value is the approximate concentration of analyte in the sample.
- 11) R = The sample results are rejected due to deficiencies in the ability to analyze the sample and meet quality control criteria. The presence of the analyte can not be verified.
- 12) CRQL = Contract Required Quantitation Limit
- $13) \ Samples \ analyzed \ for \ \underline{Dissolved} \ Inorganics \ were \ field \ filtered \ using \ a. 45 \ micron, \ gravity \ flow \ filter.$
- 14) Detailed summary tables which list report limits and qualified data values for each compound analyzed for by the laboratory as well as qualified laboratory reports are available upon request.



Groundwater Analysis Summary Table for Creek Surface Water Sample Location SW-51

	1	San	pling Event (Al	Results Express	ed in Units of µ	ıg/l)			
			Baseline Results	Quarter	rly Results	With the second			
Compound	June-02	September-02	December-02	February-03	May-03	August-03	November-03	TRIGGER LEVEL	CRQL
norganics - Metals (Dissolved) ¹³									
Aluminum	_	T -	_		_		25.8		200
Antimony	5.6 B	5.3 B	8.7 B	3.0 U	8.7 B	3.7	3.7	60	60
Arsenic	7.1 B	5.8 U	3.6 U	3.6 U	3.6 U	5.3	3.2	20	10
Barium	49.1 B	60.2 B	54.8 B	59.4 B	54.8 B	49.9	42.2	1,000	200
Beryllium	0.3 B	0.1 U	0.1 U	0.1 U	0.1 U	0.1	0.1	5	5
Cadmium	0.2 U	0.2 U	0.2 U	0.2 UJ	0.2 U	0.2	0.2	5	5
Calcium	_	_	_	_	_		88,800		5,000
Chromium	0.7 U	0.7 U	2.7 B	2.5 B	2.7 B	0.8	0.8	11	10
Cobalt	— <u>—</u>	_	_	-	_	_	0.4		50
Copper	1.0 U	1.0 U	1.0 U	1.0 UJ	1.0 U	2.2	5.1	25	25
ron	86.6 B	6.4 B	4.9 U	11.9 B	4.9 U	14.1	14.1	7,000	100
ead	1.3 U	1.3 U	1.3 U	1.3 R	1.3 U	1.5	1.5	4.2	3
Magnesium	-	_	_	-	_	_	24,700		5,000
Manganese	_			- 10			4,6		15
Mercury	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1	0.1	0.2	0.2
Vickel	0.5 U	0.7 B	1.7 B	0.5 U	1.7 B	0.7	0.7	96	40
Potassium	_	_	-	L - L - L - L - L - L - L - L - L - L -	_	_	3,910		5,000
Selenium	4.0 U	4.0 UJ	4.0 UJ	4.0 R	4.0 UJ	4,4	4.4 R	8.5	5
Silver	4.1 B	0.5 U	3.3 B	0.5 U	3.3 B	0.4	0.4	10	10
Sodium		_	-	-	_	_	34,000		5,000
Thallium	10.8 Ј	3.6 U	3.6 U	3.6 UJ	3.6 U	10.6	2.6	40	10
Vanadium	_	_	_	-		_	0.8		50
Zinc	0.8 UJ	0.8 U	26.8	0.8 UJ	26.8	13,9	0.6 UJ	86	20
Inorganics - Metals and Cyanide					T.6), 3				
(Total)							2 E		
Aluminum	(8)		_	-		-	25.8		
Antimony	7	_	7.8 B	3.0 U	7.8 B	3,7	3.7		
Arsenic	_	-	3.6 U	3.6 U	3.6 U	2,9	2.9		
Barium	_	_	51.8 B	59.3 B	51.8 B	50.9	42.6		
Beryllium	_	_	0.1 U	0.1 U	0.1 U	0,1	0.1		
Cadmium	_	_	0.2 U	0.2 UJ	0.2 U	0,2	0.2		
Calcium	_	_		_	-		86,700		
Chromium	_	_	2.7 B	2.8 B	2.7 B	1.7	0.8		
Cobalt	_	_	-		_	_	0.4	The second	
Copper	-	_	1.0 U	1.0 UJ	1.0 U	1.9	3.2		
Cyanide	4.0 U	4.0 U	4.0 U	4.0 U	4.0 U	3.0	3.0	10	10
ron		_	10.0 B	74.8 B	10.0 B	49.5	83.8		
ead		_	1.3 U	1.3 R	1.3 U	1.5	1.5		
Magnesium	- Tell (-		_	-	_	_	23,900		
Manganese	_			-		_	6.5		
Mercury	_	- 5	0.1 U	0.1 U	0.1 U	0.1	0.1		
Nickel	_	- 1999	1.1 B	0.5 U	1.1 B	0.7	0.7		
Potassium	_	_		_	_	-	3,820		
Selenium		_	4.0 U	4.0 R	4.0 U	4.4 UJ	4.4 R		
ilver		_	3.0 B	0.5 U	3.0 B	0.4	0.4		
odium			_	-	_		32,800		
Thallium			3.6 UJ	3.6 U	3.6 UJ	5.9 J	2.6		
Vanadium Cinc			12.7 B	7.8 J	12.7 B	9.7	0.8 0.6 UJ		
and .	BRL	BRL	BRL	BRL	BRL	BRL	BRL		
Volatile Organic Compounds (VOCs)									
Semi-Volatile Organic Compounds (VOCs)	BBI	BRI	BDI	RDI	DDI	DDI	PDI		
	BRL	BRL	BRL BRL	BRL BRL	BRL	BRL	BRL BRL		

Notes:

- 1) All results expressed in micrograms per liter (µg/L).
- 2) Standard Inorganic Data Qualifiers have been used.
- 3) Yellow shading indicate a detection above the Contract Required Quantitation Limit (CRQL)
 4) Bold red letters with a thick outline indicates a detection above the Trigger Level.

- 4) Bold red letters with a thick outline indicates a detection above the Trigger Level.
 5) BRL = Below Report Limit; reported data values have a data qualifier of U. J, or UJ
 6) = Constituent not analyzed.
 7) U = Not detected at the listed reporting limit.
 8) B = An estimated value above the method detection limit (MDL) or the instrument detection limit (IDL) but below the CRQL.
 9) UJ = A value less than the CRQL but greater than the MDL.
 10) J = The analyte was positively identified; the associated numerical value is the approximate concentration of analyte in the sample.
- 11) R = The sample results are rejected due to deficiencies in the ability to analyze the sample and meet quality control criteria. The presence or absence of the analyte can not be verified.
- 12) CRQL = Contract Required Quantitation Limit
- 13) Samples analyzed for <u>Dissolved Inorganics</u> were field filtered using a .45 micron, gravity flow filter.

 14) Detailed summary tables which list report limits and qualified data values for each compound analyzed for by the laboratory as well as qualified laboratory reports are available upon request.



Groundwater Analysis Summary Table for Creek Surface Water Sample Location SW-52

		S	ampling Event (Al	l Results Expresse	d in Units of μg/l)			
			Baseline Results	Quarter	y Results				
Compound	June-02	September-02	December-02	February-03	May-03	August-03	November-03	TRIGGER LEVEL	CRQL
norganics - Metals (Dissolved) ¹³						1			
Aluminum	_	T -	_		200-	T -	25.8		200
Antimony	3.7 B	4.6 B	6.5 B	3.0 U	6.5 B	3.7	3.7	60	60
Arsenic	7.3 B	5.0 B	3.6 U	3.6 U	3.6 U	4.9	2.9	20	10
Barium	46.1 B	64.3 B	52.8 B	57.7 B	52.8 B	54.2	40.7	1,000	200
Beryllium	0.5 B	0.1 U	0.1 U	0.1 U	0.1 U	0.1	0.1	5	5
Cadmium	0.2 U	0.2 U	0.2 U	0.2 UJ	0.2 U	0.2	0.2	5	5
Calcium			_				86,000		5,000
Chromium	0.7 U	0.8 B	2.8 B	3.5 B	2.8 B	2.1	0.8	11	10
Cobalt		_		_	_	_	0.4		50
Copper	1.0 U	1.0 U	1.0 U	1.0 UJ	1.0 U	2.3	3.7	25	25
Iron	81.7 B	4.9 U	4.9 U	575	4.9 U	14.1	14.1	7,000	100
Lead	1.3 U	1.3 U	1.3 U	1.3 R	1.3 U	1.5	1.5	4.2	3
Magnesium	_	_	_	_	_	_	23,500		5,000
Manganese	_	_		_		_	5.0		15
Mercury	0.1 U	0.1 U	0.1 U	0.1 U	0.1 U	0.1	0.1	0,2	0.2
Nickel	0.5 U	0.5 U	1.2 B	1.5 B	1.2 B	1.1	0.7	96	40
Potassium	0.5 0	-	1.2 B	1.5 B	1.2 B		3,720		5,000
Selenium	4.0 U	4.0 UJ	4.0 UJ	4.0 R	4.0 UJ	4.4	4.4 R	8,5	5
Silver	3.6 B	0.5 U	3.5 B	0.5 U	3.5 B	0.4	0.4	10	10
Sodium	э.о в	0.5 0	э.э в	0.3 0	3.5 B	0.4	32,900	10	5,000
Thallium	10.1 J	3.6 U		3.6 UJ	3.6 U	6.2 J	2.6	40	10
Vanadium	10.1 J	3.6 U	3.6 U	3.6 UJ	3.0 U	0.2 J	0.8	40	50
Zinc	2.6 J	0.8 U	15.8 B	0.8 UJ	15.8 B	26.5	1.5 J	86	20
Inorganics - Metals and Cyanide (Total)									
Aluminum	_	_		_		_	25.8		
Antimony	_		5.9 B	3.0 U	5.9 B	3.7	3.7		
Arsenic	_	-	3.6 U	3.6 U	3.6 U	2.9	2.9		
Barium		_	53.2 B	58.4 B	53.2 B	54.4	41.2		
Beryllium	_	-	0.1 U	0.1 U	0.1 U	0.1	0.1		
Cadmium		_	0.2 U	0.2 UJ	0.2 U	0.2	0.2		
ium	_		_	_	_	_	84,800		
romium		-	3.7 B	2.4 B	3.7 B	1.5	0.8		
Cobalt	- T	_	- 1	-	_	-	0.4		
Copper		_	1.0 U	1.0 UJ	1.0 U	1.7	3.3		
Cyanide	4.0 U	4.0 U	4.0 U	4.0 B	4.0 U	3.0	3.0	10	10
Iron		-	28.2 B	76.7 R	28.2 B	45.9	79.6		
Lead		_	1.3 U	1.3 R	1.3 U	1.5	1.5		
Magnesium	_	_	-		Mid I	4 - 33	23,300		
Manganese		_					6,8		
Mercury			0.1 U	0.1 U	0.1 U	0.1	0.1		
Nickel	_	-	1.9 B	0.5 U	1.9 B	0.7	0.7		
Potassium	-		_	_			3,710		
Selenium		_	4.0 U	4.0 R	4.0 U	4.4 UJ	4.4 R	A COLOR	
Silver		-	3.3 B	0.5 U	3.3 B	0.4	0.4		
Sodium	-	-	-	-	2677	-	32,800		
Thallium		_	3.6 UJ	3.6 U	3.6 UJ	6.0 J	2.6		
Vanadium	_	-	126.0		12 C D		0.8		
Zinc	BRL	BRL	12.6 B BRL	6.0 J BRL	12.6 B BRL	8.7 BRL	0.6 UJ BRL		
Volatile Organic Compounds (VOCs)		-		2.40		J. J. L.	L. KL		
	RPI	BRI	RPI	RPI	RPI	ppi	RPI		
Volatile Organic Compounds (VOCs) Semi-Volatile Organic Compounds (SVOCs) Pesticides / PCBs	BRL	BRL	BRL BRL	BRL BRL	BRL BRL	BRL BRL	BRL BRL		

- All results expressed in micrograms per liter (μg/L).
 Standard Inorganic Data Qualifiers have been used.
- 2) Sandard inorganic Data Quantiers have been used.

 3) Yellow shading indicate a detection above the Contract Required Quantitation Limit (CRQL)

 4) Bold red letters with a thick outline indicates a detection above the Trigger Level.

 5) BRL = Below Report Limit; reported data values have a data qualifier of U. J, or UJ

 6) = Constituent not analyzed.

 7) U = Not detected at the listed reporting limit.

 8) B = An extinated when when the prothod detection limit (ADL) or the instrument detection.

- 8) B = An estimated value above the method detection limit (MDL) or the instrument detection limit (IDL) but below the CRQL.
- 9) UJ = A value less than the CRQL but greater than the MDL.
- 10) J = The analyte was positively identified; the associated numerical value is the approximate concentration of analyte in the sample.

 11) R = The sample results are rejected due to deficiencies in the ability to analyze the sample and meet quality control criteria. The presence or absence of the analyte can not be verified.

 12) CRQL = Contract Required Quantitation Limit
- 13) Samples analyzed for Dissolved Inorganics were field filtered using a .45 micron, gravity flow filter.
- 14) Detailed summary tables which list report limits and qualified data values for each compound analyzed for by the laboratory as well as qualified laboratory reports are available upon request.

Skinner Landfill West Chester, Ohio Groundwater Analysis Summary Table for Outfall Surface Water Run Off Location SWD-1

			Baseline Results	Quarter	ly Results				
Compound	June-02	September-02	December-02	February-03	May-03	August-03	November-03	TRIGGER LEVEL	60 10 200 5 5
Inorganics - Metals (Dissolved) ¹³	Location is Dry			Location is Dry	6 9/4/29		Location is Dry		
Antimony	-	6.9 B	3.3 B	_	5.7 B	3.7		60	60
Arsenic	_	3.6 U	4.3 B	_	2.9 U	2.9	-	20	10
Barium	-	29.1 B	33.0 B	_	22.0 B	20.8	_	1,000	200
Beryllium	10 TO 1 -	0.1 U	0.1 U		0.1 U	0.1	-	5	5
admium		0.2 U	0.2 U	_	0.2 U	0.2	_	5	5
Chromium	_	0.7 U	2.1 B	_	2 B	0.8	_	11	10
Copper	_	2.5 B	2.4 B	_	9 B	5.1	_	25	25
ron	_	1.3 U	4.9 U	_	14.1 U	14.1	-	7,000	100
ead		0.1 U	1.3 U	_	1.5 UJ	1.5	_	4.2	3
Mercury	_	0.1 U	0.1 U	- A-754	0.1 U	0.1	-	0.2	0.2
Jickel	_	2.6 B	1.7 B		1.3 B	1.5		96	40
elenium		4.0 R	4.0 U	_	4.4 U	4.4	_	8,5	5
ilver	-	0.5 U	2.6 B	_	0.4 U	0.4	_	10	10
hallium	_	3.6 U	3.6 U	_	2.6 UJ	2.6	_	40	10
line	_	86,6 J	93.7	_	76.2	48.0 J	_ 3	86	20
norganics - Metals and Cyanide Total) Antimony	_	_	6.7 B	- 1	5.8 B	3.7	_		
Arsenic	_	- 33	7.2 B	_	2.9 U	2.9	-		
Barium	-	- 0	36.1 B		26.4 B	21.7	-		
Beryllium	-		0.1 U	_	0.1 U	0.1	-		
Cadmium		_	0.2 U		0.1 U	0.2			
Chromium	_	-	1.9 B	-	0.2 B	0.8	-		
Copper	_	_	6.3 B	_	3.6 B	24.0	-		
Cyanide	_	4.0 B	4.0 U	Mark Towns	3.0 U	3.0	_	10	10
ron	-		768	_	461	72.2	-		
ead			1.3 U		1.5 UJ	1.5			
Mercury Nickel	_		0.1 U 3.7 B	_	0.1 U 1.3 B	0.1	7.14		
elenium	_	=======================================	3.7 B 4.0 U	_	1.3 B 4.4 U	1.4 4.4 UJ		-	
ilver	_	_	2.0 B		0.4 U	0.4 0.4			
Thallium		_	3.6 UJ		2.6 U	2.6 UJ			
inc	_	_	102		167	91.1 J			
Volatile Organic Compounds (VOCs)		BRL	BRL	_	BRL	BRL			
Semi-Volatile Organic Compounds		BRL	BRL	_	BRL	BRL	_		
SVOCs)									

- Notes:

 1) All results expressed in micrograms per liter (µg/L).

 2) Standard Inorganic Data Qualifiers have been used.

 3) Yellow shading indicate a detection above the Contract Required Quantitation Limit (CRQL)

 4) Bold red letters with a thick outline indicates a detection above the Trigger Level.

 5) BRL = Below Report Limit; reported data values have a data qualifier of U. J, or UJ

 6) = No Sample Available (Well Dry)

 7) U = Not detected at the listed reporting limit.

 8) B = An estimated value above the method detection limit (MDL) or the instrument detection limit (IDL) but below the CRQL.

 9) UJ = A value less than the CRQL but greater than the MDL.

 10) J = The analyte was positively identified; the associated numerical value is the approximate concentration of analyte in the sample.

 11) R = The sample results are rejected due to deficiencies in the ability to analyze the sample and meet quality control criteria. The presence or absence of the analyte can not be verified.

 12) CRQL = Contract Required Quantitation Limit

 13) Samples analyzed for Dissolved Inorganics were field filtered using a .45 micron, gravity flow filter.

 14) Detailed summary tables which list report limits and qualified data values for each compound analyzed for by the laboratory as well as qualified laboratory reports are available upon request.

Skinner Landfill West Chester, Ohio Groundwater Analysis Summary Table for Outfall Surface Water Run Off Location SWD-2

		Sam	pling Event (All	Results Expresse	ed in Units of µ	g/l)			
		ly Results							
Compound	June-02	September-02	December-02	February-03	May-03	August-03	November-03	TRIGGER LEVEL	CRQL
Inorganics - Metals (Dissolved) ¹³	Location is Dry	Location is Dry	Location is Dry				Location is Dry		
Antimony	_		_	3.9 B	4.6 B	3.7	_	60	60
Arsenic	_	_	_	3.6 U	2.9 U	2.9	-	20	10
Barium	_			15.9 B	20.4 B	29.1	-	1,000	200
Beryllium	_	_	_	0.1 B	0.1 U	0.1	_	5	5
Cadmium	_	_	_	0.2 U	0.2 U	0.2	_	5	5
Chromium			_	0.7 U	2.4 B	0.8		11	10
Copper	_	_	_	2.3 B	5.0 B	1.2	_	25	25
Iron	_	_	_	4.9 U	14.1 U	14.1	_	7,000	100
Lead	_	_		1.3 U	1.5 UJ	1.5	_	4.2	3
Mercury		_	_	0.1 U	0.1 U	0.1	_	0.2	0,2
Nickel				1.8 B	2.8 B	2.3		96	40
Selenium			_	4.0 U	4.4 U	4.4		8.5	5
Silver	_	_		0.5 U	0.4 U	0.4	_	10	10
Thallium				7.1 B	2.6 U	2.6		40	10
Zinc	_	_		1.0 B	5.5 B	23.6 J		86	20
Inorganics - Metals and Cyanide (Total)				0.5.0	£0.D	4.0			
Antimony Arsenic			_	8.5 B 3.6 U	5.0 B 2.9 U	2.9			
Barium				15.6 B	21.7 B	28.4			
Beryllium				0.1 U	0.1 U	0.1	_		
Cadmium		_		0.1 U	0.2 U	0.2		0000	
Chromium				2.2 B	2.1 B	0.8			
Copper			_	10.9 B	2.8 B	11.7			
Cyanide	_		_	4.0 U	- L.U D	3.0	_	10	10
Iron	_		_	20.6 B	131	17.4	_	10	10
Lead				1.3 U	1.5 UJ	1.5			
Mercury			_	0.1 U	0.1 U	0.1	_		
Nickel	10			2.8 B	2.6 B	2.4	_		
Selenium		_		4.0 UJ	4.4 U	4.4 UJ	_		
Silver		_		0.5 U	0.4 U	0.4			
Thallium	_	_		3.6 U	2.6 UJ	2.6 UJ	_		
Zinc	_	_	_	4.5 B	14.7 B	30.0 J	_	0.00	
Volatile Organic Compounds (VOCs)			-	-	-	BRL			3630
bis(2-Chloroethly) ether		_				10.0 U	_	13.6	10.0
Semi-Volatile Organic Compounds (SVOCs)	-		-,-	BRL	BRL	BRL	77-38		20,0
Pesticides / PCBs	-	_	-	BRL	BRL	BRL	-		HAT I

Notes:
Laboratory Analytical data for July, August, and September of 2001 for SWD-2 is labeled as sample location "SWD-4" which was an alternate sample location in very close proximity to SWD-2 used when sample was not available 1) All results expressed in micrograms per liter (µg/L).

2) Standard Inorganic Data Qualifiers have been used.

3) Yellow shading indicate a detection above the Contract Required Quantitation Limit (CRQL)

4) Bold red letters with a thick outline indicates a detection above the Trigger Level.

5) BRL = Below Report Limit; reported data values have a data qualifier of U. J, or UJ

6) — = No Sample Available (Well Dry)

7) U = Not detected at the listed reporting limit.

8) B = An estimated value above the method detection limit (MDL) or the instrument detection limit (IDL) but below the CRQL.

9) UJ = A value less than the CRQL but greater than the MDL.

10) J = The analyte was positively identified; the associated numerical value is the approximate concentration of analyte in the sample.

11) R = The sample results are rejected due to deficiencies in the ability to analyze the sample and meet quality control criteria. The presence or absence of the analyte can not be verified.

12) CRQL = Contract Required Quantitation Limit

13) Samples analyzed for <u>Dissolved</u> Inorganics were field filtered using a .45 micron, gravity flow filter.

14) Detailed summary tables which list report limits and qualified data values for each compound analyzed for by the laboratory as well as qualified laboratory reports are available upon request.

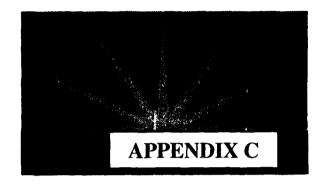
Groundwater Analysis Summary Table for Outfall Surface Water Run Off Location SWD-3

		San	npling Event (All	Results Expresse	d in Units of µ	g/l)			
			Baseline Results	Quarter	ly Results				
Compound	June-02	September-02	December-02	February-03	May-03	August-03	November-03	TRIGGER LEVEL	CRQL
norganics - Metals (Dissolved) ¹³	Location is Dry								
duminum		_			_	_	98.7		200
antimony	_	5.0 B	6.5 B	3.5 B	3.7 U	3.7	3.7	60	60
rsenic	_	4.2 B	3.6 U	3.6 U	2.9 U	2.9	2.9	20	10
arium	_	23.4 B	13.3 B	34.1 B	26.6 B	19.1	40.1	1,000	200
eryllium	_	0.2 B	0.1 U	0.3 B	0.1 U	0.1	0.1	5	5
admium	_	0.2 U	0.2 U	0.2 U	0.2 U	0.2	0.2	5	5
alcium			_	_	_	-	130,000		5,000
hromium	_	0.7 U	2.7 B	0.7 U	2.3 B	0.8	1.4	11	10
obalt	-			-	_	_	0.4		50
opper	_	2.0 B	1.0 U	1.0 U	2.3 B	1.2	10.4	25	25
ron	_	14.3 B	4.9 U	59.5 B	14.7 B	14.1	59.0	7,000	100
ead	10 h -	1.3 U	1,3 U	1.3 U	1.5 UJ	1.5	1.5	4,2	3
Magnesium	-	-	-	-	_	-	28,500		5,000
Manganese				_	_		10.9		15
Mercury	_	0.1 U	0.1 U	0.1 U	0.1 U	0.1	0.1 UJ	0.2	0.2
lickel	_	3.7 B	2.6 B	0.5 U	1.1 B	1.1	0.7	96	40
otassium	- Indiana	-	_	_	-	_	3,870		5,000
elenium	_	4.0 U	4.0 U	4.0 R	4.4 U	4.4	4.4	8,5	5
ilver	_	0.5 U	2.4 B	0.6 B	0.4 U	0.4	0.4	10	10
odium	_	_	_	_	_	_	11,100		5,000
hallium	_	3.6 U	3.6 U	6.5 J	2.6 UJ	2.6	2.6	40	10
anadium		_		_		_	2.2		50
Cinc	_	6.7 B	14.9 B	3.2 B	2.2 B	19.0 J	91.6 J	86	20
Total) Muminum	T -	F -	_	I - I		Ι –	177		
Antimony	_	_	6.5 B	4.0 B	4.1 B	3.7	3.7		
arsenic	_	_	3.6 U	3.6 U	2.9 U	2.9	2.9		
Sarium	_	_	24.3 B	41.8 B	37.7 B	29.0	37.0		
Beryllium		_	0.1 U	0.1 U	0.1 U	0.1	0.1		
Cadmium			0.2 U	0.2 U	0.2 U	0,2	0.2		
Calcium	-			_			12,100		
Chromium	_	-	5.0 B	6.4 B	4.2 B	0.8	1.0		
Cobalt	-	_	-			-	0.4		
Copper			4.4 B	8,8 B	6.0 B	8.6	14.8	10	10
Cyanide		4.0 B	4.0 U	4.0 U	3.0 U	3.0	3.0	10	10
ron	-	_	3,380	1,620	3,290	3,360	155		
ead	_	_	1.3 U	1.4 B	1.5 UJ	1.5	1.5		
Magnesium	-	-	_	=		-	26,600		
Manganese						0:	16.5		
Mercury Nickel	-	-	0.1 U 5.1 B	0.1 U 2.5 B	0.1 U 3.4 B	0.1	0.1 UJ 0.7	-	
		_	5.1 B	2.5 B	3.4 B	4.2	3,560	-	
otassium			4.0 U	4.0 UJ	4.4 U	4.4 UJ	3,360		
ilver	_		2.6 B	0.5 U	0.4 U	0.4	0.4		
odium	1 -		2.5 B	-	-	v.1_	10,300		
hallium	_		3.6 UJ	3.6 U	2.6 UJ	2.6 UJ	2.6		
	_	_	_	_	_		0.8		
Vanadium		_	35.4	59.0	32.3	42.9 J	32.6 J		
	-								
line	_	BRL	BRL	BRL	BRL	BRL	BRL	and ships	
/anadium //olatile Organic Compounds (VOCs) //olatile Organic Compounds //osemi-Volatile Organic Compounds //osemi-Volatile Organic Compounds		BRL BRL	BRL BRL	BRL BRL	BRL	BRL	BRL		

- I) All results expressed in micrograms per liter (µµ/L).
 2) Standard Inorganic Data Qualifiers have been used.
 3) Yellow shading indicate a detection above the Contract Required Quantitation Limit (CRQL)
 4) Bold red letters with a thick outline indicates a detection above the Trigger Level.

- 4) Bold red letters with a thick outline indicates a detection above the Trigger Level.
 5) BRL = Below Report Limit; reported data values have a data qualifier of U. J., or UJ
 6) = Constituent not analyzed.
 7) U = Not detected at the listed reporting limit.
 8) B = An estimated value above the method detection limit (MDL) or the instrument detection limit (IDL) but below the CRQL.
 9) UJ = A value less than the CRQL but greater than the MDL.
 10) J = The analyte was positively identified; the associated numerical value is the approximate concentration of analyte in the sample.
 11) R = The sample results are rejected due to deficiencies in the ability to analyze the sample and meet quality control criteria. The presence or absence of the analyte can not be verified.
 12) CRQL = Contract Required Quantitation Limit
 13) Samples analyzed for <u>Dissolved</u> Inorganics were field filtered using a .45 micron, gravity flow filter.
 14) Detailed summary tables which list report limits and qualified data values for each compound analyzed for by the laboratory as well as qualified laboratory reports are available upon request.





LABORATORY DATA VALIDATION REPORT



DATA VALIDATION REPORT

FOR

SKINNER LANDFILL SITE

EARTH TECH: PROJECT NUMBER 38335

LABORATORY REPORT NUMBER 203111311

PROJECT MANAGER: Ron Rolker

Date: January 12, 2004

Data Validator: Mark Kromis

APPENDIX C LIST OF ACRONYMS

BFB Bromofluorobenzene CC Continuing Calibration

CCV Continuing Calibration Verification
CCB Continuing Calibration Blanks
CLP Contract Laboratory Program
CRDL Contract Required Detection Limit
DFTPP Decafluorotriphenylphosphine

GC/MS Gas Chromatograph Mass Spectrometer

IC Initial Calibration

ICB Initial Calibration Blank
IDL Instrument Detection Limit
ICP Inductively Coupled Plasma
ICS Interference Check Sample
ICV Initial Calibration Verification

ILM Inorganic Analysis Multi-Media Multi-Concentration

INDAM Individual A Mixture INDBM Individual B Mixture mg/L milligrams per liter

MS/MSD Matrix Spike Matrix Spike Duplicate
OLC Organic Analysis Low Concentration

OLM Organic Analysis Multi-Media Multi-Concentration

%D Percent Difference

% RSD Percent Relative Standard Deviation

PB Preparation Blanks
QC Quality Control
RF Response Factor

RPD Relative Percent Difference
RRF Relative Response Factor
SDG Sample Delivery Group
SOW Statement of Work

µg/L micrograms per liter

US EPA United States Environmental Protection Agency

VOC Volatile Organic Compounds
VTSR Validated Time of Sample Receipt

DATA VALIDATION SUMMARY – SAMPLE DELIVERY GROUP 203111311 INORGANICS

Validation of the inorganics data, as prepared by Gulf Coast Analytical Laboratories (GCAL) for the samples collected from the Skinner Landfill site in November 2003, was conducted by Earth Tech using the National Functional Guidelines for Inorganic Data Review, (US EPA, February, 1994), as appropriate. These data were reported by GCAL under Sample Delivery Group (SDG) 203111311.

GCAL#	Sample Description
203111311-01	SKGW07R1008
203111311-02	SKGW06R1008
203111311-03	SKGW591008
203111311-04	SKGW601008
203111311-05	SKGW62A1008
203111311-06	SKGW641008
203111311-08	SKGW07R1008 (DISS)
203111311-09	SKGW06R1008 (DISS)
203111311-10	SKGW591008 (DISS)
203111311-11	SKGW601008 (DISS)
203111311-12	SKGW62A1008 (DISS)
203111311-13	SKGW641008 (DISS)
203111311-14	SKGW581008
203111311-15	SKGW58FD1008
203111311-16	SKGWFB1008
203111311-18	SKGW581008 (DISS)
203111311-19	SKGW58FD1008 (DISS)
203111311-20	SKGWFB1008 (DISS)
203111311-21	SKGW261008
203111311-22	SKGW301008
203111311-23	SKGW611008
203111311-24	SKGW611008 MS
203111311-26	SKGW611008 DUP
203111311-27	SKGW631008
203111311-28	SKGW241008
203111311-30	SKGW261008 (DISS)
203111311-31	SKGW301008 (DISS)
203111311-32	SKGW611008 (DISS)
203111311-33	SKGW611008 MS (DISS)
203111311-34	SKGW611008 DUP (DISS)
203111311-35	SKGW631008 (DISS)
203111311-36	SKGW241008 (DISS)

INTRODUCTION

Analysis Multi-media Multi-concentration ILM04.) Statement of Work (SOW). Results of the sample analyses are reported by the laboratory as either qualified or unqualified. Unqualified results mean that the reported values maybe used without reservation. Various qualifier codes are used by the laboratory to denote specific information regarding the analytical results.

The data validation process is intended to evaluate the data on a technical basis. The data package also was subjected to an internal laboratory quality review prior to submission to Earth Tech for data validation.

During the validation process, laboratory-qualified and unqualified data are verified against all available supporting documentation. Based on this evaluation, qualifier codes may be added, deleted or modified by the data user. Final results are therefore, either qualified or unqualified. Validator-qualified results are annotated with the following codes in accordance with the Functional Guidelines:

- U The constituent was analyzed for, but was not detected above the level of the associated analytical reporting limit. The associated value is either the sample quantitation limit or the sample detection limit.
- J The analyte was positively identified; the associated numerical value is the approximate concentration of the analyte in the sample.
- UJ The analyte was not detected above the reported sample quantitation limit. However, the reported quantitation limit is approximate and may or may not represent the actual limit of quantitation necessary to accurately and precisely measure the analyte in the sample.
- R The sample results are rejected due to serious deficiencies in the ability to analyze the sample and meet quality control criteria. The presence or absence of the analyte cannot be verified.

Details of the inorganics data validation findings and conclusions are provided in the following sections of this report:

- 1. Holding Times
- 2. Calibration
 - A. Initial Calibration (IC)

B. Continuing Calibration (CC)

- 3. Blanks
- 4. Inductively Coupled Plasma (ICP) Interference Check Sample
- 5. Laboratory Control Sample (LCS)
- 6. Duplicate Analysis
- 7. Spike Sample Analysis
- 8. ICP Serial Dilution
- 9. System Performance
- 10. Documentation
- 11. Overall Assessment

1. HOLDING TIMES

All samples for inorganics analyses were analyzed within the 180-day holding time for preserved aqueous samples. Mercury analyses were conducted within the 28-day holding time for aqueous samples undergoing CLP protocol. Cyanide analyses were conducted within the 14-day holding time. The cooler temperature upon receipt at the laboratory was within the recommended temperature of 4°C +/- 2°C .

2. CALIBRATION

A. Initial Calibration

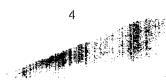
The percent recoveries for the Initial Calibration Verification (ICV) standard were within Quality Control (QC) limits for all constituents.

B. Continuing Calibration

The percent recoveries for the Continuing Calibration Verification (CCV) standard were within QC limits for all constituents.

3. BLANKS

The Initial Calibration Blank (ICB), Continuing Calibration Blanks (CCB) and Preparation Blanks (PB) were analyzed at the appropriate frequencies. No constituents were detected in the ICB, CCB, and PB blanks above the corresponding Contract Required Detection Limit (CRDL).



4. ICP INTERFERENCE CHECK SAMPLE

Results for the ICP analysis of the Interference Check Sample (ICS) solution AB were within 20% of the true value.

5. LABORATORY CONTROL SAMPLES

Recoveries were within the control limit (80-120%) for all constituents.

6. **DUPLICATE ANALYSIS**

The RPD between the sample and duplicate were within the acceptance criteria for all target compounds.

7. SPIKE SAMPLE ANALYSIS

The laboratory used sample SKSW611008 and SKSW611008 (Dissolved) for the matrix spike sample. The MS percent recoveries were within the acceptance criteria (75%-125%) in the total fraction with the exception of Selenium (521%). The MS percent recoveries were within the acceptance criteria (75%-125%) in the dissolved fraction with the exception of Selenium (0%) and Thallium (74%). As per the National Functional Guidelines: if spike recovery results is greater than 30% but less than the lower acceptance limit then qualify the detected results for that analyte with "J" and non-detected results with "UJ". If the percent recovery is less than 10% then qualify detected results for that analyte with "J" and non-detected results with "R".

8. ICP SERIAL DILUTION

As noted in the National Functional Guidelines: If the analyte concentration is at least 50 times above the IDL, its serial dilution analysis must then agree within 10% of the original determination after corrected for dilution. The serial dilution is performed to determine whether any significant chemical or physical interference's exist due to matrix effects. The percent differences were within the acceptance criteria for all target analytes in the total and dissolved fractions.

9. SYSTEM PERFORMANCE

The analytical system appears to have been working well at the time of these analyses, based on the evaluation of the raw data.

10. DOCUMENTATION

The documentation appeared accurate and in order.

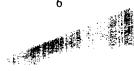
OVERALL ASSESSMENT 11.

Barium, Copper, and Iron were detected in the Field Blank (Total) at a concentration of 0.7 B, 1.6 B and 30.8 B ppb respectively. Barium, Copper, and Nickel were detected in the Field Blank (Dissolved) at a concentration of 0.3 B, 1.5 B, and 0.7 B ppb respectively. It should be noted that the laboratory supplied the water used for the Field Blank. The results that are greater than the IDL but less than the CRDL are flagged with a ("B") qualifier by the laboratory.

The percent recoveries for Zinc in the Contract Required Detection Limit (CRDL) standards were 69.8%, 69.7%, 70.1%, and 70.9%. The detected Lead results were qualified with a "J" and the non-detected Lead results were qualified with "UJ".

There was no Selenium detected in the samples analyzed for total Selenium therefore the dissolved Selenium results that were flagged with and "R" can still be used for informational purposes.

The results are acceptable with the validator-added qualifiers.



DATA VALIDATION SUMMARY – SAMPLE DELIVERY GROUP 203111311 SEMIVOLATILE ORGANICS

Validation of the Gas Chromatograph Mass Spectrometer (GCMS) semi-volatile organics data, as prepared by Gulf Coast Analytical Laboratories (GCAL) for the samples collected from the Skinner Landfill site in November 2003, was conducted by Earth Tech using the National Functional Guidelines for Organic Data Review, (US FPA, October, 1999) as appropriate. These data were reported by GCAL under SDG 203111311.

GCAL#	Sample Description
203111311-01	SKGW07R1008
203111311-02	SKGW06R1008
203111311-03	SKGW591008
203111311-04	SKGW601008
203111311-05	SKGW62A1008
203111311-06	SKGW641008
203111311-07	SKGWTB1008
203111311-14	SKGW581008
203111311-15	SKGW58FD1008
203111311-16	SKGWFB1008
203111311-21	SKGW261008
203111311-22	SKGW301008
203111311-23	SKGW611008
203111311-24	SKGW611008 MS
203111311-25	SKGW'611 008 MSD
203111311-27	SKGW631008
203111311-28	SKGW241008

INTRODUCTION

Analyses were performed according to CLP-Organic Analysis Multi-Media, Multi-Concentration OLM04.2 SOW. Results of the sample analyses are reported by the laboratory as either qualified or unqualified. Unqualified results mean that the reported values may be used without reservation. Various data qualifier codes are used by the laboratory to denote specific information regarding the analytical results. The data validation process is intended to evaluate the data on a technical basis. The data package also was subjected to an internal laboratory quality review prior to submission to Earth Tech for data validation.

During the validation process, laboratory-qualified and unqualified data are verified against all available supporting documentation. Based on this evaluation, qualifier codes may be added, deleted or modified by the data user. Final results are therefore, either qualified or unqualified. Validator-qualified results are annotated with the following codes in accordance with the Functional Guidelines:

- U The constituent was analyzed for, but was not detected above the level of the associated analytical reporting limit. The associated value is either the sample quantitation limit or the sample detection limit.
- J The analyte was positively identified; the associated numerical value is the approximate concentration of the analyte in the sample.
- UJ The analyte was not detected above the reported sample quantitation limit. However, the reported quantitation limit is approximate and may or may not represent the actual limit of quantitation necessary to accurately and precisely measure the analyte in the sample.
- R The sample results are rejected due to serious deficiencies in the ability to analyze the sample and meet quality control criteria. The presence or absence of the analyte cannot be verified.

Details of the semivolatile data validation findings and conclusions are provided in the following sections of this report:

- 1. Holding Times
- 2. GC/MS Tuning
- 3. Calibration
 - A. IC
 - B. CC
- 4. Blanks
- 5. System Monitoring Compound Recovery
- 6. MS/MSD
- 7. Internal Standards Performance
- 8. Compound Identification
- 9. Constituent Quantitation and Reported Detection Limits
- 10. System Performance
- 11. Documentation
- 12. Overall Assessment

1. HOLDING TIMES

All samples were initially extracted within the seven-day technical holding time and the five-day VTSR method holding time. The cooler temperature upon receipt at the laboratory was within the recommended temperature of $4^{\circ}C + 2^{\circ}C$.

2. GC/MS TUNING

The samples were analyzed on a single GCMS system, identified as MSSV2. Two decafluorotriphenylphosphine (DFTPP) tunes were run representing the shift in which the standards and samples were analyzed. The DFTPP tunes are acceptable.

3. CALIBRATION

A. Initial Calibration

One IC dated 11/26/03 was analyzed in support of the semivolatile sample analyses. Documentation of the IC was present in the data package, and the Relative Response Factor (RRF), as well as percent % RSD values were accurately reported for all target compounds. The criteria employed for technical data review purposes are different than those used in the method. The laboratory must meet a minimum RRF of 0.01; however, for data review purposes, a RRF criterion of "greater than or equal to 0.05" is applied to all semi-volatile compounds. The RRF's and the average RRF were within the acceptance criteria specified in the method for all reported analytes with the exception of 4-Chloroaniline. As per the National Functional Guidelines, if any initial calibration RRF is less than 0.05, qualify positive results that have acceptable mass spectral identification with "J", using professional judgement, and non-detected analytes as unusable (R).

The %RSD's were within the acceptance criteria specified in the method for all target analytes with the exception of Naphthalene (30.1%), 2.4-Dinitrophenol (34.8%), Diethylphthalate (35.1%), Di-n-butylphthalate (47.4%), Di-n-octylphthalate (37.3%), and Caprolactam (35.8%). The lowest point of the calibration curve was dropped for Diethylphthalate and the %RSD was recalculated. The recalculated %RSD was 8.4%, which is within the acceptance criteria of less than 30%. Diethylphthalate results less than 50 pph but greater than the IDL were qualified as estimated with a "J" by the data validator. The highest point of the calibration curve was dropped for Naphthalene and Caprolactam and the %RSD were recalculated. The recalculated %RSD was 28.1% and 9.0%, which are within the acceptance criteria of less than 30%. Naphthalene and Caprolactam results greater than 160 pph were qualified as estimated with a "J" by the data validator. As per the National Functional Guidelines, if the %RSD is greater than the acceptance criteria of 30% then qualify detected results as estimated with "J".

B. Continuing Calibration

Two CCs dated 11/26/03 and 12/1/03 were analyzed in support of the semivolatile sample analyses reported in the data submissions.

The RRF's for the CC dated 11/26/03 were within the acceptance criteria. The percent difference (%D) between the average RRF's and the CC Response Factors for the CC dated 11/26/03 were within the acceptance criteria with the exception the %D for 2,4-Dintrophenol, Dinbutylphthalate, and Di-n-octylphthalate. As per the National Functional Guidelines, if the %D exceeds the acceptance criteria qualify detected results for that analyte with "J" and non-detected results for that analyte with "UJ".

The RRF's for the CC dated 12/1/03 were within the acceptance criteria. The percent difference (%D) between the average RRF's and the CC Response Factors for the CC dated 12/1/03 were within the acceptance criteria with the exception the %D for Naphthalene, Hexachlorocyclopentadiene, 2,4-Dinitrophenol, Di-n-butylphthalate, and Di-n-octylphthalate. As per the National Functional Guidelines, if the %D exceeds the acceptance criteria qualify detected results for that analyte with "J" and non-detected results for that analyte with "UJ".

4. BLANKS

One laboratory semivolatile method blank and one field blank were analyzed with this SDG. The results are summarized below.

Method Blank (MB 130795)

Di-n-butyl phthalate (0.859 ppb) was detected in the method blank extracted on 11/17/03. The results for Di-n-butyl phthalate less than 8.59 ppb were qualified with "U" for samples extracted with method blank 130795.

Bis (2-Ethylhexyl) phthalate (0.414 J ppb) was also detected in the method blank extracted on 11/17/03. The results for bis (2-Ethylhexyl) phthalate less than 4.14 ppb were qualified with "U" for samples extracted with method blank 130795.

Field Blank (SKGW00FB10065)

The presence of Di-n-butyl phthalate and bis (2-Ethylhexyl) phthalate detected in the field blank was mitigated because Di-n-butyl phthalate and bis (2-Ethylhexyl) phthalate were detected in the associated method blank.

5. SYSTEM MONITORING COMPOUND RECOVERY

All reported semivolatile system monitoring compounds were recovered within acceptable control limits with the exception of Terphenyl-d14 (25%) associated with sample SKGW58FD1008. As per the National Functional Guidelines, no action is taken when one surrogate is greater than 10% and less than the acceptance limit.

6. MATRIX SPIKE MATRIX SPIKE DUPLICATE

Sample SKGW611008 was used for the matrix spike matrix spike duplicate sample. The MS/MSD percent recoveries were within the acceptance criteria with the exception of 4-Nitrophenol and Pentachlorophenol in the MS and 4-Nitrophenol in the MSD. The RPD between the MS and MSD were within the acceptance criteria. As per the National Functional Guidelines, no action is taken on MS/MSD data alone.

7. INTERNAL STANDARDS PERFORMANCE

Internal standard areas and retention times were within acceptable limits for the reported semivolatile sample analyses.

8. COMPOUND IDENTIFICATION

All reported semivolatile constituents were correctly identified with supporting chromatograms present in the data package.

9. CONSTITUENT QUANTITATION AND REPORTED DETECTION LIMITS

Constituent quantitations were correctly calculated and reported for semivolatile constituents.

10. SYSTEM PERFORMANCE

The analytical system appears to have been working well at the time of these analyses, based on the evaluation of the raw data submitted for review.

11. **DOCUMENTATION**

The documentation appeared accurate and in order.

12. OVERALL ASSESSMENT

There was low level Di-n-butylphthalate and bis (2-Ethylhexyl) phthalate contamination associated with the extraction analysis of the groundwater samples. It should be noted that phthalates are a common laboratory. The presence of Di-n-butylphthalate and bis (2-Ethylhexyl) phthalate were mitigated in all of the groundwater samples. The results are acceptable with the validator-added qualifiers.

DATA VALIDATION SUMMARY – SAMPLE DELIVERY GROUP 203111311 VOLATILE ORGANIC

Validation of the GC/MS volatile organics data, as prepared by Gulf Coast Analytical Laboratories (GCAL) for the samples collected from the Skinner Landfill site in November 2003, was conducted by Earth Tech using the National Functional Guidelines for Organic Data Review, (US EPA, October, 1999), as appropriate. These data were reported by GCAL under SDG 203111311.

GCAL#	Sample Description
203111311-01	SKGW07R1008
203111311-02	SKGW06R1008
203111311-03	SKGW591008
203111311-04	SKGW601008
203111311-05	SKGW62A1008
203111311-06	SKGW641008
203111311-07	SKGWTB1008
203111311-14	SKGW581008
203111311-15	SKGW58FD1008
203111311-16	SKGWFB1008
203111311-17	SKGWTB1008
203111311-21	SKGW261008
203111311-22	SKGW301008
203111311-23	SKGW611008
203111311-24	SKGW611008 MS
203111311-25	SKGW611008 MSD
203111311-27	SKGW631008
203111311-28	SKGW241008
203111311-29	SKGWTB1008

INTRODUCTION

Analyses were performed according to CLP-Organic Analysis Low Concentration OLC02.0 SOW. Results of the sample analyses are reported by the laboratory as either qualified or unqualified. Unqualified results mean that the reported values may be used without reservation. Various qualifier codes are used by the laboratory to denote specific information regarding the analytical results. The data validation process is intended to evaluate the data on a technical basis. The data package also was subjected to an internal laboratory quality review prior to submission to Earth Tech for data validation.

During the validation process, laboratory-qualified and unqualified data are verified against all available supporting documentation. Based on this evaluation, qualifier codes may be added, deleted or modified by the data user. Final results are therefore, either qualified or unqualified. Validator-qualified results are annotated with the following codes in accordance with the Functional Guidelines:

- U The constituent was analyzed for but was not detected above the level of the associated analytical reporting local. The associated value is either the sample quantitation limit or the sample detection limit.
- J The analyte was positively identified: the associated numerical value is the approximate concentration of the analyte in the sample.
- UJ The analyte was not detected above the reported sample quantitation limit.

However, the reported quantitation limit is approximate and may or may not represent the actual limit of quantitation necessary to accurately and precisely measure the analyte in the sample.

R The sample results are rejected due to serious deficiencies in the ability to analyze the sample and meet quality control criteria. The presence or absence of the analyte cannot be verified.

The volatiles data validation findings and conclusions are provided in the following sections of this report:

- 1. Holding Times
- 2. GC/MS Tuning
- 3. Calibration
 - A. IC
 - B. CC
- 4. Blanks
- 5. System Monitoring Compound Recovery
- 6. MS/MSD
- 7. Laboratory Control Sample
- 8. Internal Standards Performance
- 9. Compound Identification
- 10. Constituent Quantitation and Reported Detection Limits
- 11. System Performance

- 12. Documentation
- 13. Overall Assessment

1. HOLDING TIMES

All samples for Volatile Organic Compounds (VOC) analyses were analyzed within the 14-day technical holding time and the 10-day VTSR method holding time. The cooler temperature upon receipt at the laboratory was within the recommended temperature of 4°C +/- 2°C.

2. GC/MS TUNING

All samples were analyzed on a single GC/MS system, identified as MSV2. Two bromofluorobenzene (BFB) tunes were run. The BFB tunes were acceptable.

3. CALIBRATION

A. Initial Calibration

Two ICs dated 11/17/03 and 11/18/03 were analyzed on Instrument MSV2 in support of the volatile sample analyses reported in the data submissions. Documentation of the IC standards was present in the data package, and RRF's as well as %RSD values were accurately reported. The criteria employed for technical data review purposes are different than those used in the method. The laboratory must meet a minimum RRF of 0.01; however, for data review purposes, a RRF criterion of "greater than or equal to 0.05" is applied to all volatile compounds. The %RSD's were within the acceptance criteria specified in the method for all target analytes.

The RRF's and the average RRF for the IC dated 11/17/03 were within the acceptance criteria specified in the method for all target analytes with the exception of Acetone and 2-Butanone. As per the National Functional Guidelines, if any initial calibration RRF is less than 0.05, qualify positive results that have acceptable mass spectral identification with "J", using professional judgement, and non-detected analytes as unusable (R).

The RRF's and the average RRF for the IC dated 11/18/03 were within the acceptance criteria specified in the method for all target analytes with the exception of Acetone and 2-Butanone. As per the National Functional Guidelines, if any initial calibration RRF is less than 0.05, qualify positive results that have acceptable mass spectral identification with "J", using professional judgement, and non-detected analytes as unusable (R).

B. Continuing Calibration

Two CC's dated 11/17/03 and 11/18/03 were analyzed on instrument MSV2 in support of the volatile sample analyses reported in the data submissions.

The percent difference (* i) between the average RIF's and the CC RF's were within the acceptance criteria for all target analytes. The CC REF's were within the acceptance criteria specified in the method for all target analytes with the exception of Acetone and 2-Butanone. The Acetone and 2-Butanone results were previously qualified under section 3A above.

4. BLANKS

Two laboratory volatile method blanks, a storage blank, three Trip Blanks, and a Field Blank were analyzed with this SDG. The results are summarized below.

Method Blanks

1117V2BLK01 (11/17/03)

Methylene chloride was detected at a concentration of 0.14 ppb in the method blank analyzed on 11/17/03.

1118V2BLK01 (11/18/03)

There were no target analytes detected in the method blank analyzed on 11/18/03.

Storage Blank (VHBLK01)

There were no target analytes detected in the storage blank.

Trip Blank (SKGWTB1008)

The Methylene chloride detected in the Trip Blank dated 11 12/03 was mitigated by the presence of Methylene chloride in the associated method blank. Sulfur dioxide was detected (as a Tentatively Identified Compound TIC) in the Trip Blank at a concentration of 335 ppb.

Trip Blank (SKGWTB1008)

Sulfur dioxide was detected at a concentration of 311 ppb in the Trip Blank dated 11/13/03.

Trip Blank (SKGWTB1008)

There were no target analytes detected in the Trip Blank dated 11/14/03.

Field Blank (SKGWFB1008)

Ethylbenzene (0.075 ppb), Methylene chloride (0.72 ppb), Toluene (0.88 ppb), and Xylenes (0.43 ppb) were detected in the Field Blank collected on 11/13/03. The Methylene chloride detected in the Field Blank collected on 11/13/03 was mitigated by the presence of Methylene chloride in the associated method blank. Sulfur dioxide was detected (as a Tentatively Identified Compound TIC) in the Field Blank at a concentration of 5.1 ppb.

5. SYSTEM MONITORING COMPOUND RECOVERY

All reported volatile system monitoring compounds were recovered within acceptable control limits for all samples.

6. MATRIX SPIKE/MATRIX SPIKE DUPLICATE

Sample SKGW611008 was submitted for MS/MSD analysis. The percent recoveries and RDP between the MS/MSD were within the acceptance limits. A matrix spike/matrix spike duplicate is not required when analyzing samples under the CLP SOW OLC02.0

7. LABORATORY CONTROL SAMPLE

Two LCS were analyzed in conjunction with this SDG. Recoveries were within the control limit for all constituents.

8. INTERNAL STANDARDS PERFORMANCE

Internal Standard areas and retention times were within acceptable limits for the reported volatile sample analyses.

9. COMPOUND IDENTIFICATION

All reported VOCs were correctly identified with supporting chromatograms present in the data package.

10. CONSTITUENT QUANTITATION AND REPORTED DETECTION LIMITS

Constituent quantitations were correctly calculated and reported for VOCs.

11. SYSTEM PERFORMANCE

The analytical system appears to have been working well at the time of these analyses, based on the evaluation of the raw data.

12. DOCUMENTATION

The documentation appeared accurate and in order.

13. OVERALL ASSESSMENT

The results are acceptable with the validator-added qualifiers. It should be noted that the field blank contained detectable quantities of petroleum related analytes although the constituents were not detected in any of the associated surface water samples, therefore no action was taken.

DATA VALIDATION SUMMARY - SAMPLE DELIVERY GROUP 203111311 PESTICIDES

Validation of the Gas Chromatography (GC) pesticides data, as prepared by Gulf Coast Analytical Laboratories (GCAL) for the samples collected from the Skinner Landfill site in November 2003, was conducted by Earth Tech using the National Functional Guidelines for Organic Data Review, (US EPA, October, 1999), as appropriate. These data were reported by GCAL under SDG 203111311.

GCAL#	Sample Description
203111311-01	SKGW07R1008
203111311-02	SKGW06R1008
203111311-03	SKGW591008
203111311-04	SKGW'601008
203111311-05	SKGW62A1008
203111311-06	SKGW641008
203111311-14	SKGW581008
203111311-15	SKGW58FD1008
203111311-16	SKGWFB1008
203111311-21	SKGW261008
203111311-22	SKGW301008
203111311-23	SKGW611008
203111311-24	SKGW611 008 MS
203111311-25	SKGW611 008 MSD
203111311-27	SKGW631008
203111311-28	SKGW241008

INTRODUCTION

Analyses were performed according to CLP-Organic Analysis Multi-Media, Multi-Concentration OLM04.2 SOW. Results of the sample analyses are reported by the laboratory as either qualified or unqualified. Unqualified results mean that the reported values may be used without reservation. Various qualifier codes are used by the laboratory to denote specific information regarding the analytical results.

The data validation process is intended to evaluate the data on a technical basis. The data package also was subjected to an internal laboratory quality review prior to submission to Earth Tech for data validation.

During the validation process, laboratory-qualified and unqualified data are verified against all available supporting documentation. Based on this evaluation, qualifier codes may be added, deleted or modified by the data user. Final results are therefore, either qualified or unqualified. Validator-qualified results are annotated with the following codes in accordance with the Functional Guidelines:

- U The constituent was analyzed for, but was not detected above the level of the associated analytical reporting limit. The associated value is either the sample quantitation limit or the sample detection limit.
- J The analyte was positively identified; the associated numerical value is the approximate concentration of the analyte in the sample.
- UJ The analyte was not detected above the reported sample quantitation limit. However, the reported quantitation limit is approximate and may or may not represent the actual limit of quantitation necessary to accurately and precisely measure the analyte in the sample.
- R The sample results are rejected due to serious deficiencies in the ability to analyze the sample and meet quality control criteria. The presence or absence of the analyte cannot be verified.

Details of the pesticide data validation findings and conclusions are provided in the following sections of this report:

- 1. Holding Times
- 2. Gas Chromatograph/Electronic Capture Detector (GC/ECD) Instrument Performance Check
- 3. IC
- 4. Calibration Verification
- 5. Blanks
- 6. Surrogate Spikes
- 7. Matrix Spike/Matrix Spike Duplicate (MS/MSD)
- 8. Pesticide Cleanup Checks
- 9. Target Compound Identification
- 10. Constituent Quantitation and Reported Detection Limits
- 11. Documentation
- 12. Overall Assessment

1. HOLDING TIMES

All samples were extracted within the seven-day technical holding time and the five-day VTSR method holding time. The cooler temperature upon receipt at the laboratory was within the recommended temperature of $4^{\circ}C + t^{\circ} - 2^{\circ}C$.

2. GC/ECD INSTRUMENT PERFORMANCE CHECK

The Performance Evaluation Mixture (PEM) was analyzed at the correct frequency. Absolute retention times were within limits.

The percent resolution between adjacent peaks was within QC limits for the Pesticide Analyte Resolution Check with the exception of Endosulfan sulfate analyzed 12/01/03 on the confirmation column. The percent resolution between adjacent peaks is within QC limits for the Performance Evaluation Mixtures (PEM). The percent breakdown for both 4,4-DDT and Endrin in each PEM was less than 20.0% for both GC columns. The combined percent breakdown for 4,4-DDT and Endrin in each PEM was less than 30.0% for both GC columns.

3. INITIAL CALIBRATION

Individual standard mixtures A and B were analyzed at the correct frequencies and concentrations. The percent resolution criterion was met for Individual standard mixtures A and B.

The Percent Relative Standard Deviation (%RSD) of the calibration factors for each of the single component pesticides was less than 20%.

The multi-component target compounds were analyzed separately on both columns at a single concentration level. Retention times were determined from a minimum of three peaks.

4. CALIBRATION VERIFICATION

Absolute retention times were within appropriate time retention windows

5. BLANKS

One laboratory method blank was analyzed with this SDG. The results are summarized below.

Method Blank 130813

No constituents were detected above the laboratory-reporting limit. This blank corresponds to all samples extracted on 11/17/03.

6. SURROGATE SPIKES

Decachlorobiphenyl (DCB) and tetrachloro-m-xylene (TCX) surrogate spike recoveries were within the acceptance criteria for all samples.

7. MATRIX SPIKE/MATRIX SPIKE DUPLICATE

Sample SKGW611008 was used for the matrix spike/matrix spike duplicate sample. The MS/MSD percent recoveries were within the acceptance criteria with the exception of gamma-BHC. The RPD between the MS and MSD were within the acceptance criteria. As per the National Functional Guidelines, no action is taken on MS/MSD data alone.

8. PESTICIDE CLEANUP CHECKS

Recoveries of all pesticides and surrogates were within 80-120% for the lot of Florisil cartridges utilized for pesticide cleanup.

9. TARGET COMPOUND IDENTIFICATION

All reported pesticide data were correctly identified with supporting chromatograms present in the data package.

10. CONSTITUENT QUANTITATION AND REPORTED DETECTION LIMITS

Constituent quantitations were correctly calculated and reported for pesticide constituents.

11. DOCUMENTATION

The documentation appeared accurate and in order.

12. OVERALL ASSESSMENT

The results are acceptable with the validator-added qualifiers.

REFERENCES

US EPA, 1994. National Functional Guidelines for Inorganic Data Review.

US EPA, 1999. National Functional Guidelines for Organic Data Review.

PERFORMED BY

GULF COAST ANALYTICAL LABORATORIES, INC.

Report Date 12/03/2003

GCAL Report 203111311

Part 1 of 2

Deliver To Earth Tech 200 Vine Street Wilder, KY 41076 859-442-2300

Attn Pat Higgins

Customer Earth Tech

Project Skinner Landfill

000004

CASE NARRATIVE

Client: Earth Tech Report: 203111311

Gulf Coast Analytical Laboratories received and analyzed the sample(s) listed on the sample cross-reference page of this report. Receipt of the sample(s) is documented by the attached chain of custody. This applies only to the sample(s) listed in this report. No sample integrity or quality control exceptions were identified unless noted below.

SEMI-VOLATILES MASS SPECTROMETRY

Sample 20311131115 (SKGW58FD1008) had one surrogate outside of control limit in the base-neutral fraction.

In the semi-volatile analysis, 4-Nitrophenol was recovered above QC limits in the MS/MSD. Pentachlorophenol was above the QC limit in the MSD.

Samples 20311131115 (SKGW58FD1008) and 20311131128 (SKGW241008) have elevated detection limits due to insufficient sample volume.

SEMI-VOLATILES GAS CHROMATOGRAPHY

In the analysis of the MS MSD, the spike recovery for gamma-GHC was below QC limits. This is attributed to matrix interference.

In the analysis of RESC01 (resolution check), Methoxychlor and Endosulfan Sulfate were not resolved on the confirmation column, however all compounds were resolved on the initial column.

METALS

In the ILM04.1 - CLP Metals analysis for prep batch 265574, the MS recovery was outside the control limits for Selenium. The LCS recovery was within control limits. This indicates the analysis is in control and the sample is affected by matrix interference. A post-digestion spike was performed on the QC sample for this batch with a recovery of 0%.

In the ILM04.1 - CLP Metals analysis for prep batch 265576, the MS recovery was outside the control limits for Selenium and Thallium. The LCS recovery was within control limits. This indicates the analysis is in control and the sample is affected by matrix interference. A post-digestion spike was performed on the QC sample for this batch with a recovery of 0% for Selenium and 45% for Thallium.

The MS recovery is not applicable for Iron for prep batch 265574 because the sample concentration is greater than four times the spike concentration.

MISCELLANEOUS

Samples 20311131104 (SKGW601008), 20311131105 (SKGW62A1008), 20311131112 (SKGW62A1008), 20311131121 (SKGW261008), 20311131122 (SKGW301008), 20311131126 (SKGW611008 DUP) and 20311131134 (SKGW611008 DUP (DISS)) had to be preserved at the laboratory with Nitric Acid.

Laboratory Endorsement

Sample analysis was performed in adjordance with approved methodologies provided by the Environmental Protection Agency or other recognized agencies. The samples and their corresponding extracts will be maintained for a period of 30 days unless otherwise arranged. Following this retention period the samples will be disposed in apportance with GCAL's Standard Operating Procedures.

Common Abbreviations Utilized in this Report

ND Indicates the result was Not Detected at the specified RDL

DO Indicates the result was Diluted Out

Indicates the result was subject to Matrix Interference Indicates the result was Too Numerous To Count

SUBC Indicates the analysis was Sub-Contracted

FLD Indicates the analysis was performed in the Field

PQL Practical Quantitation Limit
MDL Method Detection Limit
RDL Reporting Detection Limit

00:00 Reported as a time equivalent to 12:00 AM

Reporting Flags Utilized in this Report

- J Indicates an estimated value
- U Indicates the compound was analyzed for but not detected
- B (ORGANICS) indicates the analyte was detected in the associated Method Blank
- B (INORGANICS) Indicates the result is between the RDL and MDL

Sample receipt at GCAL is documented through the attached chain of custody. In accordance with ISO Guide 25 and NELAC, this report shall be reportuced only in full and with the written permission of GCAL. The results contained within this report relate only to the samples reported. The documented results are presented within this report.

This report pertains only to the samples listed in the Report Sample Summary and should be retained as a permanent record thereof. The results contained within this report are intended for the use of the client. Any unauthorized use of the information contained in this report is prohibited.

I certify that this data package is in compliance with the terms and conditions of the contract and Statement of Work both technically and for completeness, for other than the conditions in the case narrative. Release of the data contained in this hardcopy data package and in the computer-readable data submitted has been authorized by the Quality Assurance Manager or his/her designee, as verified by the following signature.

SCOTT A. BAILEY

OPERATIONS MANAGER
GCAL REPORT 203111311

Report Sample Summary

GCAL ID	Client ID	Matrix	Collect Date/Time	Receive Date/Time
20311131101	SKGW07R1008	Water	11/12/2003 14:53	11/13/2003 09:30
20311131102	SKGW06R1008	Water	11/12/2003 15:25	11/13/2003 09:30
20311131103	SKGW591008	Water	11/12/2003 11:05	11/13/2003 09:30
20311131104	SKGW601008	Water	11/12/2003 11:28	11/13/2003 09:30
20311131105	SKGW62A1008	Water	11/12/2003 12:01	11/13/2003 09:30
20311131106	SKGW641008	Water	11/12/2003 12:40	11/13/2003 09:30
20311131107	SKGWTB1008	Water	11/12/2003 00:00	11/13/2003 09:30
20311131108	SKGW07R1008 (DISS)	Water	11/12/2003 14:53	11/13/2003 09:30
20311131109	SKGW06R1008 (DISS)	Water	11/12/2003 15:25	11/13/2003 09:30
20311131110	SKGW591008 (DISS)	Water	11/12/2003 11:05	11/13/2003 09:30
20311131111	SKGW601008 (DISS)	Water	11/12/2003 11:28	11/13/2003 09:30
20311131112	SKGW62A1008 (DISS)	Water	11/12/2003 12:01	11/13/2003 09:30
20311131113	SKGW641008 (DISS)	Water	11/12/2003 12:40	11/13/2003 09:30
20311131114	SKGW581008	Water	11/13/2003 15:10	11/14/2003 09:30
20311131115	SKGW58FD1008	Water	11/13/2003 15:20	11/14/2003 09:30
20311131116	SKGWFB1008	Water	11/13/2003 15:45	11/14/2003 09:30
20311131117	SKGWTB1008	Water	11/13/2003 00:00	11/14/2003 09:30
20311131118	SKGW581008 (DISS)	Water	11/13/2003 15:10	11/14/2003 09:30
20311131119	SKGW58FD1008 (DISS)	Water	11/13/2003 15:20	11/14/2003 09:30
20311131120	SKGWFB1008 (DISS)	Water	11/13/2003 15:45	11/14/2003 09:30
20311131121	SKGW261008	Water	11/14/2003 12:40	11/15/2003 12:05
20311131122	SKGW301008	Water	11/14/2003 10:15	11/15/2003 12:05
20311131123	SKGW611008	Water	11/14/2003 11:00	11/15/2003 12:05
20311131124	SKGW611008 MS	Water	11/14/2003 11:20	11/15/2003 12:05
20311131125	SKGW611008 MSD	Water	11/14/2003 11:35	11/15/2003 12:05
20311131126	SKGW611008 DUP	Water	11/14/2003 11:35	11/15/2003 12:05
20311131127	SKGW631008	Water	11/14/2003 12:20	11/15/2003 12:05
20311131128	SKGW241008	Water	11/14/2003 14:35	11/15/2003 12:05
20311131129	SKGWTB1008	Water	11/14/2003 00:00	11/15/2003 12:05
20311131130	SKGW261008 (DISS)	Water	11/14/2003 12:40	11/15/2003 12:05
20311131131	SKGW301008 (DISS)	Water	11/14/2003 10:15	11/15/2003 12:05
20311131132	SKGW611008 (DISS)	Water	11/14/2003 11:00	11/15/2003 12:05
20311131133	SKGW611008 MS (DISS)	Water	11/14/2003 11:20	11/15/2003 12:05
20311131134	SKGW611008 DUP (DISS)	Water	11/14/2003 11:35	11/15/2003 12:05
20311131135	SKGW631008 (DISS)	Water	11/14/2003 12:20	11/15/2003 12:05
20311131136	SKGW241008 (DISS)	Water	11/14/2003 14:35	11/15/2003 12:05

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Lab Namer	GCAL		Pampe D SH	KG M07R1008		
Lab Code.	LA024 Dase No		Contract			
Matrix: Wa	iter		548 No		SDG No.: 2	03111311
Sample wt/vi	ol: <u>25</u> Units: mi.		Lati Sample (D)	2031113110	1	
Level: (low/n	ned)		Lab File D: 20	311:7/70542		
% Moisture:			Date Collected:	11/12/03	Time:	1453
GC Calumn:	D8-624-30M ID: .53		Date Received:	11/13/03		
instrument i	D: MSV2		Date Analyzed:	11/17/03	Time:	1506
Concentrated	di Extract Volume:	(µL)	Dilution Factor:	1	Analyst	RSP
Soil Aliquot V	-	<u></u>				
CONCENT	TRATION UNITS: Up1		Analytical Metho	d: OLC02.1	- CLP Vo	
-	. COMPOUND		RESULT	Q	RL	
71-55-6	1,1,1-Trichioroemane		T - C	T 0 T	1.0	7
79-34-5	1,1,2,2-Tetrach:oroethane		1	 	1.0	4
79-00-5	1,1,2-Trichloroemane			 	1.0	4
75-34-3	1.1-Dichloroethane			 " 	1.0	
75-35-4	1,1-Dichloroethene		 		1.0	4
120-82-1	1.2.4-Trichloroperizene		<u>-</u>	U	1.0	4
106-93-4			1.0		1.0	- .
95-50-1	1,2-Dibromoethane		1.3	- U	1.0	- -
107-06-2	1,2-Dichlorobenzene		7.3	- 0	1.0	<u>-</u> :
	1,2-Dichloroethane		5	- 0	1.0	-
540-59-0 78-87-5	1,2-Dichloroethere		7.3	U	1.0	-
	1,2-Dichloropropane		1.0	- U	1.0	-
	1,3-Dichlorobenzene 1,4-Dichlorobenzene		1.0	U -	1.0	-
78-93-3	2-Butanone		5.0		5.0	- R
591-78-6	2-Hexanone		£.0		5.0	- '`
108-10-1	4-Methyl-2-pentanone		5.C	- 	5.0	-
67-64-1	Acetone		5.0	U	5.0	- R
71-43-2	Benzene			U	1.0	- ''
75-27-4	Bromodichloromethane			U	1.0	-
75-25-2	Bromoform			U	1.0	-
74-83-9	Bromomethare			U	1.0	-
75-15-0	Carbon disulfice				1.0	-
56-23-5	Carbon tetractionice		7.c	U	1.0	i
108-90-7	Chlorobenzene		1.0	-	1.0	
75-00-3	Chloroethane		0	U	1.0	1
67-66-3	Chloroform			U	1.0	1
74-87-3	Chloromethane				1.0	•
124-48-1	Dibromochioromethane				1.0	_
	dis-1,3-Dichloropropene		<u>_</u>		1.0	-
	trans-1,3-Dichloropropene		7.0	- 	1.0	•
100-41-4	Ethylbenzene				1.0	•
75-09-2	Methylene chichde			- 	2.0	•
100.42-5	Shrana			- 11	10	•

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1A VOLATILE ORGANICS ANALYSIS DATA SHEET

Lab Name: GCAL	Sample ID: SKGW07R1008				
Lab Code: LA024 Case No.:	Contract:				
Matrix: Water	SAS No.: SDG No.: 203111311				
Sample wt/vol: 25 Units: mL	Lab Sample ID: 20311131101				
Level: (low/med)	Lab File ID: 2031117/T0542				
% Moisture: not dec.					
GC Column: DB-624-30M ID: .53 (mm					
Instrument ID: MSV2					
Concentrated Extract Volume: (µL	•				
Soil Aliquot Volume: (µL	Prep Method:				
CONCENTRATION UNITS: ug/L	Analytical Method: OLC02.1 - CLP Vo				
CAS NO. COMPOUND	RESULT Q RL				
127-18-4 Tetrachloroethene	1.0 U 1.0				
108-88-3 Toluene	1.0 U 1.0				
79-01-6 Trichloroethene	1.0 U 1.0				
75-01-4 Vinyl chloride	1.0 U 1.0				
1330-20-7 Xylene (total)	1.0 U 1.0				

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SAMPLE NO.

15.3

TENTAT LEUK DENT FED TIMPOLNOS SKGW07R1008 Lab Name: GCAL Contract Case No.: \$48 No: SDG No.: 203111311 Lab Code: LA024 _ab Samble ID: 20311131101 Matrix: Water Sample wt/volt: Units: Lab File ID: 2031117/T0542 Level: (low/med) Date Collected: 11/12/03 Time: 1453 % Moisture: not dec. Date Received: 11/13/03 GC Column: D8-624-30M ID: .53 (mm) Date Analyzed: 11/17/03 Time: 1506 Instrument IO: MSV2 Dilution Factor: 1 Analyst: RSP Soil Extract Volume: (µL) Soil Aliquot Volume: (µL) Number TICs Found: 1 **CONCENTRATION UNITS.** CAS NO. **COMPOUND** RT EST. CONC. Q

1 464

1. 7446-09-5 Sulfur dioxide

1/12/by

1A VOLATILE ORGANICS ANALYSIS DATA SHEET

Lab Name: GCAL		Sample ID: SKGW06R1008				
Lab Code:	LA024 Case No.:		Contract:			
Matrix: Wa	ter		SAS No.:		SDG No.: 2	03111311
Sample wt/ve	ol: 25 Units: mL		Lab Sample ID:	20311131	102	
Level: (low/m	ned)		Lab File ID: 20	31117/T054	6	
	not dec.		Date Collected:	11/12/03	Time:	1525
	DB-624-30M ID: .53		Date Received:	11/13/03		
Instrument IC			Date Analyzed:		· · · · · · · · · · · · · · · · · · ·	1644
Concentrated	dl Extract Volume:				Analyst:	
	/olume:		Prep Method:		· · · · · · · · · · · · · · · · · · ·	·
	RATION UNITS: ug/L	- '' ′	Analytical Metho	d: OLC02	.1 - CLP Vo	
	-		DCOLU T	•	D.	
	. COMPOUND	· 	RESULT		RL	٦
71-55-6	1,1,1-Trichloroethane		1.0	U	1.0	4
79-34-5	1,1,2,2-Tetrachloroethane		1.0	U	1.0	4
79-00-5	1,1,2-Trichloroethane		1.0	U	1.0	4
75-34-3	1,1-Dichloroethane	· · · · · · · · · · · · · · · · · · ·	1.0	U	1.0	<u> </u>
75-35-4	1,1-Dichloroethene		1.0	U	1.0	_
120-82-1	1,2,4-Trichlorobenzene		1.0	U	1.0]
106-93-4	1,2-Dibromoethane		1.0	U	1.0	1
95-50-1	1,2-Dichlorobenzene		1.0	U	1.0	1
107-06-2	1,2-Dichloroethane		1.0	U	1.0	
540-59-0	1,2-Dichloroethene		1.0	U	1.0	_
78-87-5	1,2-Dichloropropane		1.0	U	1.0]
541-73-1	1,3-Dichlorobenzene		1.0	U	1.0]
106-46-7	1,4-Dichlorobenzene		1.0	U	1.0	n
78-93-3	2-Butanone		5.0	U	5.0]R
591-78-6	2-Hexanone		5.0	U	5.0	4
108-10-1	4-Methyl-2-pentanone		5.0	U	5.0	
67-64-1	Acetone		5.0	U	5.0] R
71-43-2	Benzene		1.0	U	1.0	
75-27-4	Bromodichloromethane		1.0	U	1.0	1
75-25-2	Bromoform		1.0	U	1.0	4
74-83-9	Bromomethane		1.0	U	1.0	}
75-15-0	Carbon disulfide		1.0	U	1.0	
56-23-5	Carbon tetrachloride		1.0	U	1.0	1
108-90-7	Chlorobenzene		1.0	U	1.0	ļ
75-00-3	Chloroethane		1.0	บ	1.0	l
67-66-3	Chloroform		1.0	U	1.0	1
74-87-3	Chloromethane		1.0	U	1.0	
124-48-1	Dibromochloromethane	. 	1.0	U	1.0	
	cis-1,3-Dichloropropene		1.0	U	1.0	
	trans-1,3-Dichloropropene		1.0	U	1.0	
100-41-4	Ethylbenzene		1.0	U	1.0	
75-09-2	Methylene chloride		2.0	U	2.0	
100-42-5	Styrene		1.0	U	1.0	

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..OLAT LE CRISAN, 19 1/44/48 8 0 474 SHEET

Lac Name: GCAL	Sample > Shigwebrasis
Lab Code: LA024 Case No	Scrittad:
Matrix: Water	SAS No. SDG No.: 203111311
Sample wt/vol: 25 Units: m	Lab Sample iD: 20311131102
Level: (low/med)	Lab File :D: 2031117/T0546
% Moisture: not dec.	Date Collected: 11/12/03 Time: 1525
GC Column: <u>D8-624-30M</u> ID: .53 (mm) Date Received: 11/13/03
Instrument ID: MSV2	Date Analyzed: 11/17/03 Time: 1644
Concentrated Extract Volume: (µL) Dilution Factor: 1 Analyst RSP
Soil Aliquot Volume: (µL	Prep Method:
CONCENTRATION UNITS: ug/L	Analytical Method: OLC02.1 - CLP Vo
CAS NO. COMPOUND	RESULT Q RL
127-18-4 Tetrachloroethene	0.11 J 1.0
108-88-3 Toluene	1.0 U 1.0
79-01-6 Trichloroethene	1.0 U 1.0
75-01-4 Vinyl chloride	1.0 U 1.0
1330-20-7 Xylene (total)	1.0 U 1.0

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VOLATILE ORGANICS ANALYSIS DATA SHEET TENTATIVELY IDENTIFIED COMPOUNDS

SAMPLE NO.	
SKGW06R1008	

Lab Name: GCAL	Contract:			i -		
Lab Code: LA024 Case No.:		SAS No.:	s	DG No.: 203	111311	
Matrix: Water		Lab Sample ID:	20311131102			_
Sample wt/vol: Units:		Lab File ID: 20	31117/T0546	,		
Level: (low/med)		Date Collected:	11/12/03	Time: _1	525	_
% Moisture: not dec.		Date Received:	11/13/03	<u>-</u>		_
GC Column: DB-624-30M ID: .53	(mm)	Date Analyzed:	11/17/03	Time: _1	644	_
Instrument ID: MSV2	·····	Dilution Factor:	1	Analyst:	RSP	
Soil Extract Volume:	_ (µL)					
Soil Aliquot Volume:	_ (µL)				•	
Number TICs Found: 1 CONCENTRATION UNITS:						
CAS NO. COMPOUND		RT	EST. C	CONC.	Q	
1 . 7446-09-5 Sulfur dioxide		1.547	3.2	4	• •	٦ ،

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COLATINA DROANVOS AN ALINS SIDIATA SHEET

Lab Name: GCAL	Sample D SH	GW591008	
Lab Code: LAG24 Case No.:	Contract		
Matrix: Water	SAS No		SDG No.: 203111311
Sample wit/vot: 25 Units: mL	Lab Sample ID:	2031113110	3
Level: (low/med)		31117/T0547	
% Moisture: not dec.		11/12/03	Time: 1105
			1116. 1105
GC Column: D8-624-30M ID: .53 (m	m) Date Received:	11/13/03	
Instrument ID: MSV2	Date Analyzed:	11/17/03	Time: 1709
Concentrated! Extract Volume: (µ	L.) Dilution Factor:	1	Analyst: RSP
Soil Aliquot Volume: (µ	L.) Prep Method: _		
CONCENTRATION UNITS: Up/L	Analytical Metho	d: OLC02.1	- CLP Vo
CAS NO. COMPOUND	RESULT	Q	RL
71-55-6 1.1.1-Trichloroethane	1 1.0		1.0
79-34-5 1,1.2.2-Tetrachiorpethane		0	1.0
79-00-5 1,1,2-Trichloroethane	10	U	1.0
75-34-3 1,1-Dichloroethane	- .	 	1.0
75-35-4 1,1-Dichloroethene	1.0	U	1.0
120-82-1 1_2_4-Trichloroberzene	1.0	 	1.0
106-93-4 1_2-Dibromoethane	1.0	l U	1.0
95-50-1 1,2-Dichlarobenzene	1.0	 	1.0
107-06-2 1_2-Dichloroethane	1.0	1 0	1.0
540-59-0 1,2-Dichloroethene	1.0	U T	1.0
78-87-5 1,2-Dichloropropane	1.0	U	1.0
541-73-1 1,3-Dichlarobenzene	1.C	- i - 	1.0
106-46-7 1,4-Dichlorobenzene	1.0	U	1.0
78-93-3 2-Butanone	5. C	U	5.0 R
591-78-6 2-Hexanone	5. C	Ü	5.0
108-10-1 4-Methyl-2-pentanone	5.0	U	5.0
67-64-1 Acetone	5.0	U	5.0 R
71-43-2 Benzene	1.0	U	1.0
75-27-4 Bromodichloromethane	1.0	บ	1.0
75-25-2 Bromoform	1.0	U	1.0
74-83-9 Bromomethane	1.0	U	1.0
75-15-0 Carbon disulfide	- 0	IJ	1.0
56-23-5 Carbon tetrachlorice	1.0	U	1.0
108-90-7 Chlorobenzene	٠.٥	U	1.0
75-00-3 Chloroethane	1.0	U	1.0
67-66-3 Chloroform	1.0	U	1.0
74-87-3 Chloromethane	1.0	U	1.0
124-48-1 Dibromochloromethane	٥.٠	U	1.0
10061-01-5 cis-1,3-Dichioropropene	1.0	U	1.0
10061-02-6 Irans-1,3-Dichloroprocene	*.0	U	1.0
100-41-4 Ethylbenzane	1.0	U	1.0
75-09-2 Methylene chloride	2.0	U	2.0
100-42-5 Styrene	0.0	U	1.0

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1A VOLATILE ORGANICS ANALYSIS DATA SHEET

Lab Name: GCAL	Sample ID: SKGW591008				
Lab Code: LA024 Case No.:	Contract:				
Matrix: Water	SAS No.: SDG No.: 203111311				
Sample wt/vol: 25 Units: mL					
Level: (low/med)	Lab File ID: 2031117/T0547				
% Moisture: not dec.					
GC Column: DB-624-30M ID: .53 (m					
Instrument ID: MSV2	Date Analyzed: 11/17/03 Time: 1709				
Concentrated Extract Volume: (µ	L) Dilution Factor: 1 Analyst: RSP				
Soil Aliquot Volume: (µ	L) Prep Method:				
CONCENTRATION UNITS: ug/L	Analytical Method: OLC02.1 - CLP Vo				
CAS NO. COMPOUND	RESULT Q RL				
127-18-4 Tetrachloroethene	1.0 U 1.0				
108-88-3 Toluene	1.0 U 1.0				
79-01-6 Trichloroethene	1.0 U 1.0				
75-01-4 Vinyl chloride	1.0 U 1.0				
1330-20-7 (Xylene (total)	1.0 U 1.0				

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	SAMPLE NO.
-	SKGW591008

-5/-7	·T',EL' DE	BYT FEL DO MACLN	DS	SKG	W591008
Lab Name: GCAL	_Contract:				
Lab Code: LA024 Case No.:		\$45 No.		SDG No.: 203	111311
Matrix: Water		Lab Sample (D:	2031113110	3	
Sample wt/vol: Units:		Lab File ID: 20	311 17/T0547		
Level: (low/med)		Date Collected:	11/12/03	Time:	1105
% Moisture: not dec.	<u></u>	Date Received:	11/13/03		
GC Column: D8-624-30M 1D: 53	(mm)	Date Analyzed:	11/17/03	Time: _1	1709
Instrument ID: MSV2		Dilution Factor:	1	Analyst:	RSP
Soil Extract Volume:	(µL)				
Soil Aliquot Volume:	(µL)				
Number TICs Found: 1 CONCENTRATION UNITS:					
CAS NO. COMPOUND		RT	EST.	CONC.	Q
1 7446.00.5 Subject Souids		3 745	2	na I	

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VOLATILE ORGANICS ANALYSIS DATA SHEET

Lab Name:	GCAL		Sample ID: SK	GW601008		
Lab Code:	LA024 Case No.:	-	Contract:			
Matrix: Wa	iter		SAS No.:		SDG No.:	203111311
Sample wt/v	ol: 25 Units: mL		Lab Sample ID:	20311131	104	
	ned)		Lab File ID: 20	31117/T054	8	
% Moisture:	not dec.		Date Collected:	11/12/03	Time:	1128
	DB-624-30M ID: .53		Date Received:	11/13/03		
Instrument II		-	Date Analyzed:			1825
Concentrated	dl Extract Volume:				Analyst	······································
	/olume:	-	Prep Method:		***************************************	
	RATION UNITS: ug/L	•	Analytical Metho	d: OLC02	.1 - CLP Vo	
	•		DECIII T	0	DI.	
	. COMPOUND		RESULT		RL	-
71-55-6	1,1,1-Trichloroethane	· · · · · · · · · · · · · · · · · · ·	1.0	U	1.0	_
79-34-5	1,1,2,2-Tetrachloroethane		1.0	U	1.0	4
79-00-5	1,1,2-Trichloroethane		1.0	U	1.0	
75-34-3	1,1-Dichloroethane		1.0	U	1.0	4
75-35-4	1,1-Dichloroethene		1.0	U	1.0	4
120-82-1	1,2,4-Trichlorobenzene		1.0	U	1.0	4
106-93-4	1,2-Dibromoethane		1.0	U	1.0	4
95-50-1	1,2-Dichlorobenzene		1.0	U	1.0	4
107-06-2	1,2-Dichloroethane		1.0	U	1.0	4
540-59-0	1,2-Dichloroethene	 	1.0	U U	1.0	4
78-87-5	1,2-Dichloropropane		1.0	U	1.0	4
541-73-1	1,3-Dichlorobenzene		1.0	U	1.0	4
106-46-7	1,4-Dichlorobenzene	 = .	1.0	U	1.0	۱,
78-93-3	2-Butanone		5.0	U	5.0]R
591-78-6	2-Hexanone		5.0	U	5.0	4
108-10-1	4-Methyl-2-pentanone		5.0	U	5.0	4_
67-64-1	Acetone		5.0	U	5.0	_R
71-43-2 75-27-4	Benzene		1.0	U	1.0	4
75-27-4 75-25-2	Bromodichloromethane		1.0	U	1.0	-
74-83-9	Bromoform		1.0	U	1.0	
75-15-0	Bromomethane Carbon disulfide		1.0	U	1.0	4
56-23-5			1.0	Ü	1.0	-
108-90-7	Carbon tetrachloride Chlorobenzene		1.0	U		4
					1.0	4
75-00-3 67-66-3	Chloroform		1.0	U	1.0 1.0	4
74-87-3	Chloroform Chloromethane		1.0	U	1.0	4
124-48-1			1.0	Ü	1.0	4
	Dibromochloromethane		1.0	U		-
	cis-1,3-Dichloropropene trans-1,3-Dichloropropene			U	1.0	4
	<u></u>		1.0	U	1.0	4
100-41-4	Ethylbenzene		1.0		1.0	4.,
75-09-2	Methylene chloride		4.0 0.27	J	2.0	Ju
100-42-5	IStyrene		1.0	U	1.0	1

Mislor

NOUAT FURGANIOS 41 HISSEDATA SHEET

Lat Name: GCAL	hample I SFGW691 005
Lab Code: LA024 Case No.:	Contract.
Mairix: Water	SAS No SDG No.: 203111311
Sample wt/volt: 25 Units: mL	Lab Sample ID: 20311131104
Level: (lowfned)	Lab File ID: 2031117/T0548
% Moisture: not dec.	Date Collected: 11/12/03 Time: 1128
GC Column: DB-624-30M ID: .53 (mm)	Date Received: 11/13/03
Instrument ID: MSV2	Date Analyzed: 11/17/03 Time: 1825
Concentratedi Extract Volume: (µL)	Dilution Factor: 1 Analyst: RSP
Soil Aliquot Volume: (µL)	Prep Method:
CONCENTRATION UNITS: Ug/L	Analytical Method: OLC02.1 - CLP Vo
CAS NO. COMPOUND	RESULT Q RL
127-18-4 Tetrachioroethene	- 0 U 1.0
108-88-3 Toluene	1 0 U 1.0
79-01-6 Trichloroethene	1.0 U 1.0
75-01-4 Vinyl chloride	1.0 U 1.0
1330-20-7 Xylene (total)	1.0 U 1.0

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VOLATILE ORGANICS ANALYSIS DATA SHEET TENTATIVELY IDENTIFIED COMPOUNDS

SAMPLE NO.	
SKGW601008	

Lab Name: GCAL	_Contract:				
Lab Code: LA024 Case No.:		SAS No.:		SDG No.: 20	3111311
Matrix: Water		Lab Sample ID:	20311131104	.	
Sample wt/vol: Units:	······	Lab File ID:			
Level: (low/med)		Date Collected:	11/12/03	Time:	1128
% Moisture: not dec.		Date Received:	11/13/03		
GC Column: DB-624-30M ID: .53	(mm)	Date Analyzed:	11/17/03	Time:	1825
Instrument ID: MSV2	·	Dilution Factor:	1	Analys	t: RSP
Soil Extract Volume:	(µL)				
Soil Aliquot Volume:	(μL)				
Number TICs Found: 0 CONCENTRATION UNITS: CAS NO. COMPOUND		RT	EST.	CONC.	Q
1 . No tics detected	·		<u> </u>		······································

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Lat Namet	GC≱L	Sample 7 <u>3</u>	KG W62A1008		
Lat Code.	UA024 Case No	Contract			
Matrix Wa	aler	SAS No.		SDG No.: _2	203111311
Sample wt/v	olt 25 Units mil.	Lab Sample ID:	2031113110)5	
	ned)	Lab File ID: 20	·		
	not dec.			Time:	1201
				IBIR	1201
GC Calumn:	DB-624-30M ID: .53 (mm)	Date Received:	11/13/03		
instrument li	D: MSV2	Date Analyzed:	11/17/03	Time:	1850
Concentrate	di Extract Volume. (µL)	Dilution Factor:	1	Analyst	: RSP
Soil Aliquot \	Volume: (µL)	Prep Method:			
CONCENT	"RATION UNITS: 39/L	Analytical Metho	d: OLC02.1	- CLP Vo	
CAS NO	. COMPOUND	RESULT	Q	RL	
71-55-6	1,1,1-Trichloroetrane	1.0	U	1.0	7
79-34-5	1,1,2,2-Tetrachioroethane	1.0	U	1.0	1
79-00-5	1,1,2-Trichloroethane	1.0	Ü	1.0	7
75-34-3	1,1-Dichloroethane	1.0	Ü	1.0	1
75-35-4	1,1-Dichloroethere	1.0	U	1.0	1
120-82-1	1,2,4-Trichlorobenzene	1.0	U	1.0	
106-93-4	1,2-Dibromoethane	1.0	U	1.0	7
95-50-1	1,2-Dichlorobenzene	1.3	Ü	1.0	7
107-06-2	1,2-Dichloroethane	1.0	U	1.0	7
540-59-0	1,2-Dichloroethene	1.0	U	1.0	7
78-87-5	1,2-Dichloropropane	10	U	1.0]
541-73-1	1,3-Dichlorobenzene	1.0	U	1.0	
106-46-7	1,4-Dichlorobenzene	1.0	U	1.0	
78-93-3	2-Butanone	5.0	U	5.0	_R
591-78-6	2-Hexanone	5.0	U	5.0	
108-10-1	4-Methyl-2-pentanone	5.0	U	5.0	
67-64-1	Acetone	5.0	U	5.0	_ R
71-43-2	Benzene	1.0	บ	1.0	_
75-27-4	Bromodichloromethane	1.0	ับ .	1.0	_
75-25-2	Bromoform	1.0	U	1.0	_
74-83-9	Bromomethane	1.0	U	1.0	_
75-15-0	Carbon disulfide	1.0	U	1.0	_
56-23-5	Carbon tetrachionde	1.0	U	1.0	-
108-90-7	Chlorobenzene	1 (U	1.0	_
75-00-3	Chloroethane	1.0	<u> </u>	1.0	_
67-66-3	Chloroform	1.5	<u> </u>	1.0	_
74-87-3	Chloromethane	1.0	U	1.0	-
124-48-1	Dibromochloromethane	1.0	- U	1.0	_
	cis-1,3-Dichloropropene	1.0	<u> </u>	1.0	_
	trans-1,3-Dichloropropene	10	<u>U</u>	1.0	_
100-41-4	Ethylbenzene	1.0	U	1.0	- , .
75-09-2 100-42-5	Methylene chlonde	.1.0 220	J	2.0	U.
11EL47 %	No. of the second secon	• "		7 /1	

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1A VOLATILE ORGANICS ANALYSIS DATA SHEET

Lab Name: GCAL	Sample ID: SKGW62A1008
Lab Code: LA024 Case No.:	Contract:
Matrix: Water	SAS No.: SDG No.: 203111311
Sample wt/vol: 25 Units: mL	Lab Sample ID: 20311131105
Level: (low/med)	Lab File ID: 2031117/T0549
% Moisture: not dec.	Date Collected: 11/12/03 Time: 1201
GC Column: DB-624-30M ID: .53 (mm)	Date Received: 11/13/03
instrument iD: MSV2	Date Analyzed: 11/17/03 Time: 1850
Concentratedi Extract Volume: (µL)	Dilution Factor: 1 Analyst: RSP
Soil Aliquot Volume: (µL)	Prep Method:
CONCENTRATION UNITS: ug/L	Analytical Method: OLC02.1 - CLP Vo
CAS NO. COMPOUND	RESULT Q RL
127-18-4 Tetrachloroethene	1.0 U 1.0
108-88-3 Toluene	1.0 U 1.0
79-01-6 Trichloroethene	1.0 U 1.0
75-01-4 Vinyl chloride	1.0 U 1.0
1330-20-7 Xylene (total)	1.0 U 1.0

CUATIVE ORGANICS (NALVISIS DATA SHEET) TENTATIVELY DEVICE FIET COMPOUNDS

SAMPLE NO.

SKGWE2A1008

ab Name: GCA_	Contract				
ab Code: LA024 Case No :		948 No.:		SOG No.: 203	111311
lainx: Water		Lab Sample 'D:	2031113110	5	
ample wt/volt Units:		Lab File ID:			
evel: (low/med)		Date Collected:	11/12/03	Time:	1201
6 Moisture: not dec.		Date Received:	11:13/03		
GC Column: D8-624-30M ID: 53	(mm)	Date Analyzed:	11/17/03	Time:	1850
nstrument ID: MSV2		Dilution Factor:	1	Analyst:	RSP
oil Extract Volume:	(µL)				
ioit Aliquot Volume:	_ (µL)				
Number TICs Found: 0					
CONCENTRATION UNITS					
CAS NO. COMPOUND		RT	EST.	CONC.	Q
1. No bics detected			T	T	

VOLATILE ORGANICS ANALYSIS DATA SHEET

Lab Name: GCAL		Sample ID: SKGW641008				
Lab Code:	LA024 Case No.:		Contract:			
Matrix: Wa	iter		SAS No.:		SDG No.: _2	203111311
Sample wt/v	ol: 25 Units: mL		Lab Sample ID:	20311131	106	
Level: (low/m	ned)	····	Lab File ID: 203	31117/T055	50	
	not dec.		Date Collected:	11/12/03	Time:	1240
	DB-624-30M ID: .53		Date Received:	11/13/03		
Instrument (I	D. MeV2		Date Analyzed:			1914
	di Extract Volume:				Analyst	
						101
Soil Aliquot V	/olume:	(hr)	Prep Method:			
CONCENT	RATION UNITS: ug/L		Analytical Method	d: OLC02	2.1 - CLP Vo	
CAS NO.	. COMPOUND		RESULT	Q	RL	
71-55-6	1,1,1-Trichloroethane		1.0	U	1.0	7
79-34-5	1,1,2,2-Tetrachloroethane		1.0	U	1.0	1
79-00-5	1,1,2-Trichloroethane		1.0	U	1.0	7
75-34-3	1,1-Dichloroethane		1.0	Ū	1.0	7
75-35-4	1,1-Dichloroethene		1.0	U	1.0	1
120-82-1	1,2,4-Trichlorobenzene		1.0	U	1.0	7
106-93-4	1,2-Dibromoethane		1.0	U	1.0	7
95-50-1	1,2-Dichlorobenzene		1.0	U	1.0	7
107-06-2	1,2-Dichloroethane	··· ··· · · · · · · · · · · · · · · ·	1.0	U	1.0	1
540-59-0	1,2-Dichloroethene		1.0	U	1.0	7
78-87-5	1,2-Dichloropropane		1.0	U	1.0	7
541-73-1	1,3-Dichlorobenzene		1.0	U	1.0	7
106-46-7	1,4-Dichlorobenzene		1.0	U	1.0	
78-93-3	2-Butanone		5.0	U	5.0	ገ ዪ
591-78-6	2-Hexanone		5.0	U	5.0	7
108-10-1	4-Methyl-2-pentanone		5.0	Ü	5.0]
67-64-1	Acetone		5.0	U	5.0] R
71-43-2	Benzene		1.0	U	1.0]
75-27-4	Bromodichloromethane		1.0	U	1.0]
75-25-2	Bromoform		1.0	U	1.0	j
74-83-9	Bromomethane		1.0	U	1.0]
75-15-0	Carbon disulfide		1.0	Ū	1.0	1
56-23-5	Carbon tetrachloride		1.0	U	1.0	_
108-90-7	Chlorobenzene		1.0	U	1.0	1
75-00-3	Chloroethane		1.0	U	1.0]
67-66-3	Chloroform		1.0	U	1.0	1
74-87-3	Chloromethane		1.0	U	1.0	1
124-48-1	Dibromochloromethane		1.0	U	1.0	
10061-02-6	trans-1,3-Dichloropropene		1.0	U	1.0	1
10061-01-5	cis-1,3-Dichloropropene		1.0	U	1.0	1
100-41-4	Ethylbenzene		1.0	U	1.0	1
75-09-2	Methylene chloride		2.0	U	2.0	1
100-42-5	Styrene		1.0	U	1.0	

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Lat Name: GCAL	Sample C SKG.W6410C8
Lati Code: LA224 Case No.	Contract
Matrix: Water	S45 No.: 203111311
Sample wt/vol: 25 Units: mL	Lab Sample ID: 20311131106
Level: (low/med)	_ab File 'D: 2031117/T0550
% Moisture: not dec.	Date Co. ected: 11/12/03 Time: 1240
GC Column: D8-624-30M ID: 53 (mm) Date Received: 11/13/03
Instrument ID: MSV2	Date Analyzed: 11/17/03 Time: 1914
Concentrated Extract Volume: (µL) Dilution Factor: 1 Analyst RSP
Soil Aliquot Volume: (µL) Prep Method:
CONCENTRATION UNITS: ug1.	Analytical Method: OLC02.1 - CLP Vo
CAS NO. COMPOUND	RESULT Q RL
127-18-4 Tetrachloroethene	1.0 U 1.0
108-88-3 Toluene	1.0 U 1.0
79-01-6 Trichloroethene	1.0 U 1.0
75-01-4 Vinyl chloride	1.0 U 1.0
1330-20-7 Xylene (lotal)	1.0 U 1.0

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VOLATILE ORGANICS ANALYSIS DATA SHEET TENTATIVELY IDENTIFIED COMPOUNDS

SAMPLE NO.	
SKGW641008	

Lab Name: GCAL	_Contract:					
Lab Code: LA024 Case No.:		SAS No.:		SDG No.: 20	03111311	
Matrix: Water		Lab Sample ID:	20311131106			
Sample wt/vol: Units:		Lab File ID: 20	31117/T0550			
Level: (low/med)		Date Collected:	11/12/03	Time:	1240	
% Moisture: not dec.		Date Received:	11/13/03			
GC Column: DB-624-30M ID: .53	(mm)	Date Analyzed:	11/17/03	Time:	1914	·
Instrument ID: MSV2		Dilution Factor:	1	Analys	t: RSP	
Soil Extract Volume:	(µL)					
Soil Aliquot Volume:	(µL)					
Number TICs Found: 1						
CONCENTRATION UNITS:						
CAS NO. COMPOUND		RT	EST. (CONC.	Q	
1 60-29-7 Ether		2.547	1 14	4		

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CLATLE OR LAW OF HALMS STATA SHEET

Lac Name:	GCAL		Sample I Se	(GAT B1908		
Lab Code:	LAC24 Case No		Contract.			
Matrix: Wa	nter		SAS No.		SDG No.: 2	03:11311
Sample wt/v	alt 25 Units miL		Lab Sample ID:	2031113110)7	
Level: (low/n	ned)		Lab File D: 20	31117/T0541		
% Moisture:			Date Collected:	11/12/03	Time: (0000
GC Column:	DB-624-30M ID: .53	(mm)	Date Received:	11/13/03		
Instrument iC		_ ` `	Date Analized:		Time:	1442
	di Extract Volume:	(uL)			 _	
Soil Aliquot \						
-		_ ` ` ` ` `	Analytical Metho	d: OLC02.1	-CLP Vo	
CONCENT	RATION UNITS: ug/L					
CAS NO.	. COMPOUND		RESULT	Q	RL	
71-55-6	1,1,1-Trichloroethane		1.0	U	1.0	ך
79-34-5	1,1,2,2-Tetrachioroethane		1.0	U	1.0	
79-00-5	1,1,2-Trichloroethane		1.0	U	1.0	
75-34-3	1,1-Dichloroethane		1.0	U	1.0	
75-35-4	1,1-Dichloroethene		1.0	U	_1.0	
120-82-1	1,2,4-Trichlorobenzene		1.0	IJ	1.0]
106-93-4	1,2-Dibromoethane		1.0	U	1.0	
95-50-1	1,2-Dichlorobenzene			υ	1.0]
107-06-2	1,2-Dichloroethane		1.0	U	1.0	
540-59-0	1,2-Dichlaraethene		1 (U	1.0	
78-87-5	1,2-Dichloropropane		1.0	U	1.0	
541-73-1	1,3-Dichlorobenzene		1.0	U	1.0	_
106-46-7	1,4-Dichlorobenzene		1.0	U	1.0	
78-93-3	2-Butanone		5.0	U	5.0	R
591-78-6	2-Hexanone		5.0	<u> </u>	5.0	•
106-10-1	4-Methyl-2-pentar-one		5.0	U	5.0	
67-64-1	Acetone		5.0	U	5.0	R
71-43-2	Benzene		1.0	U	1.0	-
75-27-4	Bromodichloromethane		1.0	U	1.0	_
75-25-2	Bromoform		7.0	U	1.0	-
74-83-9	Bromomethane		1.0	U	1.0	•
75-15-0	Carbon disulfide		1.0	U	1.0	•
56-23-5	Carbon tetrachlonde		1.0	U	1.0	•
108-90-7	Chlorobenzene		1.0	U	1.0	•
75-00-3	Chloroethane		10	<u>U</u>	1.0	
67-66-3	Chloroform		- 0	U	1.0	
74-87-3	Chloromethane		1.0	<u>U</u>	1.0	
124-48-1	Dibromochlorometrane		1.0	U	1.0	
	dis-1,3-Dichloropropene		1.0	U	1.0	
	trans-1,3-Dichloropropene		1.0	<u> </u>	1.0	
100-41-4	Ethylbenzene		1.0	<u> </u>	1.0	
75-09-2	Methylene chlonde		70 CIE		2.0	u
100-42-5	Styrene		1.0	<u>ປ</u>	1.0	

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1A VOLATILE ORGANICS ANALYSIS DATA SHEET

Lab Name: GCAL	Sample ID: SKGWTB1008
Lab Code: LA024 Case No.:	Contract:
Matrix: Water	SAS No.: SDG No.: 203111311
	Lab Sample ID: 20311131107
Level: (low/med)	Lab File ID: 2031117/T0541
% Moisture: not dec.	Date Collected: 11/12/03 Time: 0000
GC Column: DB-624-30M ID: .53 (mm)	Date Received: 11/13/03
Instrument ID: MSV2	Date Analyzed: 11/17/03 Time: 1442
Concentrated! Extract Volume: (µL)	Dilution Factor: 1 Analyst: RSP
Soil Aliquot Volume: (µL)	Prep Method:
CONCENTRATION UNITS: ug/L	Analytical Method: OLC02.1 - CLP Vo
CAS NO. COMPOUND	RESULT Q RL
127-18-4 Tetrachloroethene	1.0 U 1.0
108-88-3 Toluene	1.0 U 1.0
79-01-6 Trichloroethene	1.0 U 1.0
75-01-4 Vinyl chloride	1.0 U 1.0
1330-20-7 Xylene (total)	1.0 U 1.0

VOLATUE OR SANIOS ENALYSIS DATA SHEET I TENTATIVELY IDENTIFIED COMPOUNDS

SAMPLE NO
DUNDS SKGWTB1008

Lab Name GCAL	Contract		<u> </u>	
Lab Code. LA024 Case No.:		545 No :	SDG No.:	203111311
Matrix: Water		Lab Sample iD	20311131107	
Sample w/vol: Units:		_ab File ID: _20:	31117/T0541	
Level: (low/med)		Date Collected:	11/12/03 Time	: _0000
% Maisture: not dec.		Date Received:	11/13/03	
GC Column: DB-624-30M ID: .53	(mm)	Date Analyzed:	11/17/03 Time	: 1442
Instrument ID: MSV2		Dilution Factor:	1 Analy	ast RSP
Soil Extract Volume:	(µL)			
Sall Aliquot Volume:	(此)			
Number TICs Found: 1				
CONCENTRATION UNITS:				
CAS NO. COMPOUND		RT	EST. CONC.	Q
1 7446-09-5 Sulfur dicorde		1.46	335	

VOLATILE ORGANICS ANALYSIS DATA SHEET ·1A

Lab Name:	GCAL	Sample ID: Sh	KGW581008		
	LA024 Case No.:	Contract:			
Matrix: Wa	iter	SAS No.:		SDG No.:	203111311
Sample wt/vo	ol: 25 Units: mL	Lab Sample ID:	20311131	114	
	ned)	Lab File ID: 20	31117/T055	52	
	not dec.	Date Collected:	11/13/03	Time:	1510
	DB-624-30M ID: .53 (mm)		11/14/03		
instrument II	· · · · · · · · · · · · · · · · · · ·			Time:	2003
	di Extract Volume: (µL)			Analysi	······································
	/olume: (µL)	Prep Method:			
	RATION UNITS: ug/L	Analytical Metho	d: OLC02	2.1 - CLP Vo	······································
	COMPOUND	RESULT	Q	RL	
71-55-6	1,1,1-Trichloroethane	1.0	ΙÜ	1.0	٦
79-34-5	1,1,2,2-Tetrachloroethane	1.0	Tu T	1.0	7
79-00-5	1,1,2-Trichloroethane	1.0	Ū	1.0	⊣ ′
75-34-3	1,1-Dichloroethane	1.0	Ú	1.0	
75-35-4	1,1-Dichloroethene	1.0	U	1.0	7
120-82-1	1,2,4-Trichlorobenzene	1.0	U	1.0	
106-93-4	1,2-Dibromoethane	1.0	U	1.0	
95-50-1	1,2-Dichlorobenzene	1.0	U	1.0	
107-06-2	1,2-Dichloroethane	1.0	U	1.0	7
540-59-0	1,2-Dichloroethene	1.0	U	1.0	-
78-87-5	1,2-Dichloropropane	1.0	U	1.0	7
541-73-1	1,3-Dichlorobenzene	1.0	U	1.0	7
106-46-7	1,4-Dichlorobenzene	1.0	U	1.0	†
78-93-3	2-Butanone	5.0	U	5.0	JR .
591-78-6	2-Hexanone	5.0	U	5.0	┦' `
108-10-1	4-Methyl-2-pentanone	5.0	U	5.0	7
67-64-1	Acetone	5.0	U	5.0	78
71-43-2	Benzene .	1.0	U	1.0	
75-27-4	Bromodichloromethane	1.0	U	1.0]
75-25-2	Bromoform	1.0	Ü	1.0]
74-83-9	Bromomethane	1.0	U	1.0]
75-15-0	Carbon disulfide	1.0	U	1.0	3
56-23-5	Carbon tetrachloride	1.0	U	1.0]
108-90-7	Chlorobenzene	- 1.0	٦	1.0]
75-00-3	Chloroethane	1.0	ב	1.0	
67-66-3	Chloroform	1.0	Ų	1.0]
74-87-3	Chloromethane	1.0	U	1.0]
124-48-1	Dibromochloromethane	1.0	U	1.0]
	cis-1,3-Dichloropropene	1.0	Ú	1.0]
	trans-1,3-Dichloropropene	1.0	U	1.0]
100-41-4	Ethylbenzene	1.0	U	1.0	
75-09-2	Methylene chloride	2.00.29	J	2.0] U
100-42-5	Styrene	1.0	Ü	1.0	1

1 12/2/2~ 000067

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Lab Name. GCAL	Sample D SKGW661008			
Lab Code: LA024 Case No.:	Contract			
Matrix: Water	SAS No.: SDG No.: 203111311			
Sample wt/vot: 25 Units mL	Lab Sample ID: 20311131114			
Level: (low/med)	Lab File ID: 2031117/T0552			
% Moisture: not dec.	Date Collected: 11/13/03 Time: 1510			
GC Column: D8-624-30M ID: .53 (mm)	Date Received: 11/14/03			
Instrument ID: MSV2	Date Analyzed: 11/17/03 Time: 2003			
Concentratedi Extract Volume: (µL)	Dilution Factor: 1 Analyst: RSP			
Soil Aliquot Volume: (µL)	Prep Method:			
CONCENTRATION UNITS: ug/L	Analytical Method: OLC02.1 - CLP Vo			
CAS NO. COMPOUND	RESULT Q RL			
127-18-4 Tetrachioroethere	1.0 U 1.0			
108-88-3 Toluene	1.0 U 1.0			
79-01-6 Trichloroethene	1.0 U 1.0			
75-01-4 Vinyl chloride	1.C U 1.0			
1330-20-7 Xylene (total)	1.C U 1.0			

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VOLATILE ORGANICS ANALYSIS DATA SHEET TENTATIVELY IDENTIFIED COMPOUNDS

	SAMPLE NO.	
[SKGW581008	

Lab Name: GCAL	_Contract:			<u>-</u>	
Lab Code: LA024 Case No.:		SAS No.:		SDG No.: 20	3111311
Matrix: Water		Lab Sample ID:	20311131114	····	
Sample wt/vol: Units:		Lab File ID:			
Level: (low/med)		Date Collected:	11/13/03	Time:	1510
% Moisture: not dec.		Date Received:	11/14/03		
GC Column: DB-624-30M ID: .53	(mm)	Date Analyzed:	11/17/03	Time:	2003
Instrument ID: MSV2		Dilution Factor:	1	Analyst	RSP
Soil Extract Volume:	(μL)				
Soil Aliquot Volume:	(µL)				
Number TICs Found: 0 CONCENTRATION UNITS: CAS NO. COMPOUND		RT	EST. (CONC.	Q
1 . No tics detected]		

UDLAN LE DROAM, NO MALAS SICATA SHEET

ے Name:	GCAL	Sample I S	GW55FD100	8
_ab Code:	LA024 isse No	Contract		
Matric Wa	ater	SAS No		SDG No.: 203111311
Sample w/v	ob 25	Lab Sample (D:	2031113111	15
Level: (low/n	ned)	Lab File ID: 20	31117/ T0553	
% Moisture:		Date Collected:	11/13/03	Time: 1520
GC Calumn:	D8-624-30M iD: .53 (mm)	Date Received:	11/14/03	
instrument it			11/17/03	Time: 2028
Concentrate	dl Extract Volume: (µL)	Dilution Factor:	1	Analyst RSP
Soil Aliquot \				
		Analytical Metho	d: OLC02.1	- CLP Vo
CONCENT	RATION UNITS: ug.L	·		
CAS NO	. COMPOUND	RESULT	Q	RL
71-55-6	1,1,1-Trichloroethane	1.0	U	1.0
79-34-5	1,1,2,2-Tetrachloroethane	1.0	U	1.0
79-00-5	1,1,2-Trichloroethane	1.0	U	1.0
75-34-3	1,1-Dichloroethane	.0	U	1.0
75-35-4	1,1-Dichloroethere	- 3	IJ	1.0
120-82-1	1,2,4-Trichiorcoenzene	• 3	U	1.0
106-93-4	1,2-Dibromoethane	1.0	U	1.0
95-50-1	1,2-Dichlorobenzene	• 3	U	1.0
107-06-2	1,2-Dichloroethane	1.0	U	1.0
540-59-0	1,2-Dichloroethere	10	U	1.0
78-87-5	1,2-Dichloropropane	1.0	U	1.0
541-73-1	1,3-Dichlorobenzene	1.0	U	1.0
106-46-7	1,4-Dichlorobenzene	•.0	υ	1.0
78-93-3	2-Butanone	5.0	IJ	5.0 K
591-78-6	2-Hexanone	5.0	ŭ	5.0
106-10-1	4-Methyl-2-pentarione	5.0	Ü	5.0
67-64-1	Acetone	5.0	U	5.0
71-43-2	Benzane	1.0	U	1.0
75-27-4	Bromodichloromethane	1.0	U	1.0
75-25-2	Bromoform	1.C	Ų	1.0
74-83-9	Bromomethane	1.0	U	1.0
75-15-0	Carbon disulfide	1.0	U	1.0
56-23-5	Carbon tetrachionde	1.0	U	1.0
106-90-7	Chlorobenzene	1.0	U	1.0
75-00-3	Chloroethane	1.0	U	1.0
67-66-3	Chloroform	1,0	บ	1.0
74-87-3	Chloromethane	1.0	U	1.0
124-48-1	Dibromochlorometrane	٠,	U	1.0
10061-01-5	dis-1,3-Dichloropropene	1.0	U	1.0
	trans-1,3-Dichiorocropene	1.0	U	1.0
100-41-4	Ethylbenzene	1.0	U	1.0
75-09-2	Methylene chloride	2.0	U	2.0
100.42-5	Shurana	1 0	11	10

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1A VOLATILE ORGANICS ANALYSIS DATA SHEET

Lab Name: GCAL	Sample ID: SKGW58FD1008			
Lab Code: LA024 Case No.:	Contract:			
Matrix: Water	SAS No.: SDG No.: 203111311			
Sample wt/vol: 25 Units: mL	Lab Sample ID: 20311131115			
Level: (low/med)	Lab File ID: 2031117/T0553			
% Moisture: not dec.	Date Collected: 11/13/03 Time: 1520 ·			
GC Column: DB-624-30M ID: .53 (mm)	Date Received: 11/14/03			
Instrument ID: MSV2	Date Analyzed: 11/17/03 Time: 2028			
Concentrated Extract Volume: (µL)	Dilution Factor: 1 Analyst: RSP			
Soil Aliquot Volume: (µL)	Prep Method:			
CONCENTRATION UNITS: ug/L	Analytical Method: OLC02.1 - CLP Vo			
CAS NO. COMPOUND	RESULT Q RL			
127-18-4 Tetrachloroethene	1.0 U 1.0			
108-88-3 Toluene	1.0 U 1.0			
79-01-6 Trichloroethene	1.0 U 1.0			
75-01-4 Vinyl chloride	1.0 U 1.0			
1330-20-7 Xylene (total)	1.0 U 1.0			

VOLATILE NO CAN DE PNACES SO ATHISHEET TENTATO SUIN DENTIFIED COMPOUNDS

SAMPLE NO.

SKGW58FD1008

				31(31) D1000
tas Name: GCAL	_ Contract			
Lab Code: EA024 Case No.:		548 No.:	SDG No.	.: 203111311
Matrix: Water		Lati Sample iD:	20311131115	
Sample wt/voi: Units		_at File D:		
Level: (lowimed)		Date Collected:	11/1 3/0 3	ime: 1520
% Moisture: not dec.		Date Received:	11/14/03	
GC Column: DB-624-30M (3:53	(mm)	Date Analyzed:	11/17/03 T	ime: 2028
Instrument ID: MSV2		Dilution Factor:	<u>1</u> A	nalyst RSP
Soil Extract Volume:	(µL)			
Soil Aliquot Volume:	(µL)			
Number TICs Found: 0				
CONCENTRATION UNITS				
CAS NO. COMPOUND		RT	EST. CONC.	. Q
1. No tics detected			I	

VOLATILE ORGANICS ANALYSIS DATA SHEET

Lab Name: GCAL		Sample ID: SKGWFB1008				
Lab Code:	LA024 Case No.:		Contract:			
Matrix: Wa	iter		SAS No.:		SDG No.: 2	03111311
Sample wt/vo	ol: 25 Units: mL		Lab Sample ID:	20311131	116	
Level: (low/m	ned)		Lab File ID: 203	31117/T055	4	
	not dec.		Date Collected:	11/13/03	Time: 1	1545
	DB-624-30M ID: .53		Date Received:	11/14/03		
Instrument IE		-	Date Analyzed:		Time: 2	2053
	di Extract Volume:				Analyst:	
	/olume:	_				
	RATION UNITS: ug/L		Analytical Method			
	COMPOUND		RESULT	Q	RL	
71-55-6	1,1,1-Trichloroethane		1.0	Ü	1.0	7
79-34-5	1,1,2,2-Tetrachioroethane		1.0	U	1.0	1
79-00-5	1,1,2-Trichloroethane		1.0	U	1.0	1
75-34-3	1,1-Dichloroethane		1.0	U	1.0	1
75-35-4	1,1-Dichloroethene	·	1.0	υ	1.0	1
120-82-1	1,2,4-Trichlorobenzene		1.0	U	1.0	1
106-93-4	1,2-Dibromoethane		1.0	U	1.0	1
95-50-1	1,2-Dichlorobenzene		1.0	U	1.0	1
107-06-2	1,2-Dichloroethane		1.0	U	1.0	1
540-59-0	1,2-Dichloroethene		1.0	U	1.0	1
78-87-5	1,2-Dichloropropane		1.0	U	1.0	1
541-73-1	1,3-Dichlorobenzene		1.0	U	1.0	1
106-46-7	1,4-Dichlorobenzene	···	1.0	Ų	1.0	1
78-93-3	2-Butanone		5.0	U.	5.0	R
591-78-6	2-Hexanone		5.0	U	5.0	7
108-10-1	4-Methyl-2-pentanone		5.0	U	5.0	1
67-64-1	Acetone		5.0	J	5.0	1 R
71-43-2	Benzene		1.0	U	1.0	1
75-27-4	Bromodichioromethane		1.0	U	1.0	
75-25-2	Bromoform		1.0	υ	1.0	1
74-83-9	Bromomethane		1.0	U	1.0	
75-15-0	Carbon disulfide		1.0	۲	1.0	1
56-23-5	Carbon tetrachloride		1.0	U	1.0	[
108-90-7	Chlorobenzene		1.0	U	1.0	1
75-00-3	Chloroethane	·	1.0	U	1.0	1
67-66-3	Chloroform		1.0	U	1.0]
74-87-3	Chloromethane		1.0	U	1.0	}
124-48-1	Dibromochloromethane		1.0	U	1.0	
10061-01-5	cis-1,3-Dichloropropene		1.0	U	1.0	
10061-02-6	trans-1,3-Dichloropropene		1.0	U	1.0	
100-41-4	Ethylbenzene		0.075	J	1.0	
75-09-2	Methylene chloride		2.0 0.72	J	2.0	11
100-42-5	Styrene		1.0	U	1.0	

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CLATILE (RIGHNITS AND UISSE DATE SHEET

Lat Name: GCAL	Sample (1) SKGM FB1008			
Lat Code: LA024 Case No	Contract			
Matrix: Water	SAS No.: SDG No.: 203111311			
Sample wt/vol: 25 Units: mL	Lab Sample (D: 20311131116			
Level: (lowfmed)	Lab File D: 2031117/T0554			
% Moisture: not dec.	Date Collected: 11/13/03 Time: 1545			
GC Column: D8-624-30M ID: 53 (mm				
Instrument ID: MSV2	Date Analyzed: 11/17/03 Time: 2053			
Concentrated Extract Volume: (µL) Dilution Factor: 1 Analyst RSP			
Soil Aliquot Volume: (µL) Prep Method:			
CONCENTRATION UNITS: 34L	Analytical Method: OLC02.1 - CLP Vo			
CAS NO. COMPOUND	RESULT Q RL			
127-18-4 Tetrachloroethene	1.0 U 1.0			
108-88-3 Toluene	C 88 J 1.0			
79-01-6 Trichloroethene	1.0 U 1.0			
75-01-4 Vinyl chloride	1.0 U 1.0			
1330-20-7 Xviene (Intal)	043 1 10			

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VOLATILE ORGANICS ANALYSIS DATA SHEET TENTATIVELY IDENTIFIED COMPOUNDS

•	SAMPLE NO.	
	SKGWFB1008	

Lab Name: GCAL	Contract:		<u> </u>	
Lab Code: LA024 Case No.:		SAS No.;	SDG No.: 2	03111311
Matrix: Water		Lab Sample ID:	20311131116	
Sample wt/vol: Units:		Lab File ID: 20	31117/T0554	
Level: (low/med)	<u>.</u>	Date Collected:	11/13/03 Time:	1545
% Moisture: not dec.		Date Received:	11/14/03	· · · · · · · · · · · · · · · · · · ·
GC Column: DB-624-30M ID: .53	(mm)	Date Analyzed:	11/17/03 Time:	2053
Instrument ID: MSV2		Dilution Factor.	1 Analy	st: RSP
Soil Extract Volume:	_ (µL)	*		
Soil Aliquot Volume:	_ (µL)			
Number TICs Found: 1 CONCENTRATION UNITS:				
CAS NO. COMPOUND		RT	EST. CONC.	Q
1 . 7446-09-5 Sulfur dioxide		2.511	5.1	

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Lab Name:	GCAL	Samble D SK	GWTB1008		
		Contract			
Matrix: Wa	ater .	SAS No		SDG No.: 2	03111311
Sample wt/v	rat: 25 Units. mil.	Lab Sample ID:	2031113111	7	
	ned)	Lab File D: 200			
	not dec.	Date Collected:			0000
GC Calumn:	: <u>DB-624-30M</u> ID: <u>.53</u> (mm)	Date Received:	11/14/03		·· ·
Instrument II	D: MSV2	Date Analyzed:	11/17/03	Time: _	1939
Concentrate	di Extract Volume: (µL)	Dilution Factor:	1	Analyst	RSP
Soil Aliquot \	Volume: (µL)	Prep Method:			
CONCENT	TRATION UNITS: ug/L	Analytical Method: OLC02.1 - CLP Vo			
CAS NO	. COMPOUND	RESULT	Q	RL	
71-55-6	1,1,1-Trichloroethane	1.0	U	1.0	7
79-34-5	1,1,2,2-Tetrachioroethane		U	1.0	1
79-00-5	1,1,2-Trichloroethane	1.0	U	1.0	7
75-34-3	1,1-Dichloroethane	1.3	U	1.0	1
75-35-4	1,1-Dichloroethene	1.0	U	1.0	1
120-82-1	1,2,4-Trichlorobenzene	1.0	U	1.0	1
106-93-4	1,2-Dibromoethane	1.0	Ü	1.0	1
95-50-1	1,2-Dichlorober zene	- 5	U	1.0	1
107-06-2	1,2-Dichloroethane	1.0	U	1.0	1
540-59-0	1,2-Dichloroethene	1.0	U	1.0	
78-87-5	1,2-Dichloropropane	1.0	U	1.0	
541-73-1	1,3-Dichlorobenzene	1.0	U_	1.0]
106-46-7	1,4-Dichlorobenzene	. 2	U	1.0] _
78-93-3	2-Butanone	5.0	· U	5.0] {
591-78-6	2-Hexanone	5.0	U	5.0	
108-10-1	4-Methyl-2-pentanone	5.0	U	5.0	
67-64-1	Acetone	5.3	U	5.0] <
71-43-2	Benzene	1.0	U	1.0	
75-27-4	Bromodichloromethane	1.0	U	1.0	
75-25-2	Bromoform	1.0	U	1.0	
74-83-9	Bromomethane	1.0	U	1.0	
75-15-0	Carbon disulfide	1.0	U	1.0]
56-23-5	Carbon tetrachionde	1.0	U	1.0	
108-90-7	Chlorobenzene	1.0	IJ	1.0	1
75-00-3	Chloroethane	1.0	U	1.0	_
67-66-3	Chloroform	1.0	U	1.0	
74-87-3	Chloromethane	13	IJ	1.0	
124-48-1	Dibromochloromethane	1.0	U	1.0	
	cis-1,3-Dichioropropene	1.0	U	1.0	
	trans-1,3-Dichioropropene	1.0	U	1.0	j
100-41-4	Ethylbenzene	1.0	U	1.0	į
75-09-2	Methylene chlonde	2.0	U	2.0	
100-42-5	Shrene	1.0	- 11	10	

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VOLATILE ORGANICS ANALYSIS DATA SHEET

Lab Name: GCAL	Sample ID: SKGWTB1008			
Lab Code: LA024 Case No.:	Contract:			
Matrix: Water	SAS No.: SDG No.: 203111311			
Sample wt/vol: 25 Units: mL				
Level: (low/med)	Lab File ID: 2031117/T0551			
% Moisture: not dec.	Date Collected: 11/13/03 Time: 0000			
GC Column: DB-624-30M ID: .53 (mm)	Date Received: 11/14/03			
Instrument ID: MSV2	Date Analyzed: 11/17/03 Time: 1939			
Concentrated Extract Volume: (µL)				
Soil Aliquot Voiume: (µL)	Prep Method:			
CONCENTRATION UNITS: ua/L	Analytical Method: OLC02.1 - CLP Vo			
CAS NO. COMPOUND	RESULT Q RL			
127-18-4 Tetrachloroethene	1.0 U 1.0			
108-88-3 Toluene	1.0 U 1.0			
79-01-6 Trichloroethene	1.0 U 1.0			
75-01-4 Vinyl chloride	1.0 U 1.0			
1330-20-7 Xviene (total)	1,0 U 1.0			

CLATILE ORGANIOS PIALINSISIO MAISHEET TENTATINELNIOENTIFIED COMFILINOS

SAMPLE NO	
SKGWTB:0	28

		1 22 30 11 3 4		SKGWTB1008
Lab Name: GCAL	Contract			
Lab Code: LA324 Case No.:		548 No:	SDG	No.: 203111311
Matric: Water		_ab Sample ID:	20311131117	
Sample w/vol: Units:		_ab File !D: 20	31117/T0551	
Level: (lowlmed)		Date Collected:	11/13/03	Time: 0000
% Moisture: not dec.		Date Received:	11/14/03	
GC Column: DB-624-30M ID: .53	_ (mm)	Date Analyzed:	11/17/03	Time: 1939
Instrument ID: MSV2		Dilution Factor:	1	Analyst: RSP
Soil Extract Volume:	(pL)			
Sail Aliquot Volume:	_ (µL)			
Number TICs Found: 1				
CONCENTRATION UNITS:				
CAS NO. COMPOUND		RT	EST. COI	NC. Q
1 . 7446-09-5 Sulfur dioxide		1.462	311	

1A VOLATILE ORGANICS ANALYSIS DATA SHEET

Lab Name:	GCAL	Sample ID: Si	KGW261008	9	
Lab Code:	LA024 Case No.:	Contract:			
Matrix: Wa	ter	SAS No.:		SDG No.: 2	203111311
Sample wt/vo	ol: 25 Units: mL	_ Lab Sample ID:	20311131	1121	
Level: (low/m	ned)	Lab File ID: 20	031118P/T0	588	
	not dec.		11/14/03	Time:	1240
	DB-624-30M ID: .53 (mm		11/15/03		
Instrument IC			11/18/03	Time:	2310
Concentrated	dl Extract Volume: (µL			Analyst:	
	/olume: (μL				
		Analytical Metho		-	
CONCENT	RATION UNITS: ug/L				-
CAS NO.	COMPOUND	RESULT	Q	RL	
71-55-6	1,1,1-Trichloroethane	1.0	U	1.0	7
79-34-5	1,1,2,2-Tetrachloroethane	1.0	U	1.0	7
79-00-5	1,1,2-Trichloroethane	1.0	U	1.0	1
75-34-3	1,1-Dichloroethane	1.0	U	1.0	7
75-35-4	1,1-Dichloroethene	1.0	U	1.0	7
120-82-1	1,2,4-Trichlorobenzene	1.0	U	1.0	7
106-93-4	1,2-Dibromoethane	1.0	U	1.0	7
95-50-1	1,2-Dichlorobenzene	1.0	U	1.0	1
107-06-2	1,2-Dichloroethane	1.0	U	1.0	7
540-59-0	1,2-Dichloroethene	1.0	U	1.0	1
78-87-5	1,2-Dichloropropane	1.0	U	1.0	7
541-73-1	1,3-Dichiorobenzene	1.0	U	1.0	7
106-46-7	1,4-Dichlorobenzene	1.0	U	1.0	7
78-93-3	2-Butanone	5.0	U	5.0	18
591-78-6	2-Hexanone	5.0	U	5.0	1
108-10-1	4-Methyl-2-pentanone	5.0	U	5.0	7
67-64-1	Acetone	5.0	U	5.0	TR .
71-43-2	Benzene	1.0	,U	1.0	7
75-27-4	Bromodichloromethane	1.0	U	1.0	1
75-25-2	Bromoform	1.0	U	1.0	7
74-83-9	Bromomethane	1.0	U	1.0	7
75-15-0	Carbon disulfide	1.0	U	1.0	7
56-23-5	Carbon tetrachloride	1.0	U	1.0	1
108-90-7	Chlorobenzene	1.0	U	1.0	7
75-00-3	Chloroethane	1.0	Ü	1.0	7
67-66-3	Chloroform	1.0	U	1.0	
74-87-3	Chloromethane	1.0	U	1.0	1
124-48-1	Dibromochloromethane	1.0	Ü	1.0	1
10061-01-5	cis-1,3-Dichloropropene	1.0	U	1.0	1
10061-02-6	trans-1,3-Dichloropropene	1.0	U	1.0	1
	Ethylbenzene	1.0	U	1.0	1
75-09-2	Methylene chloride	2.0	U	2.0	1
	Styrene	1.0	U	1.0	1

112/04

VOLATILE GRIGANICA ANALYSIS DATA SHEET

Lab Name: GCAL	Sample :D: S KG W2 51 006				
Lan Code: LA024 Case No.:	Contract:				
Matrix: Water	SAS No.: SDG No.: 203111311				
Sample wt/vol: 25 Units: mL	Lab Sample ID: 20311131121				
Level: (lowlmed)	Lab File :D: 2031118P/T0588				
% Moisture: not dec.	Date Collected: 11/14/03 Time: 1240				
GC Column: 0B-624-30M ID: .53 (mm)	Date Received: 11/15/03				
Instrument ID: MSV2	Date Analyzed: 11/18/03 Time: 2310				
Concentratedi Extract Volume: (µL)	Dilution Factor: 1 Analyst: HJL				
Soil Aliquot Volume: (µL)	Prep Method:				
CONCENTRATION UNITS: ug/L	Analytical Method: OLC02.1 - CLP Vo				
CAS NO. COMPOUND	RESULT Q RL				
127-18-4 Tetrachioroethene	1.0 U 1.0				
108-88-3 Toluene	1.0 U 1.0				
79-01-6 Trichloroethene	1.C U 1.0				
75-01-4 Vinyl chloride	r.c U 1.0				
1330-20-7 Xylene (total)	1.0 U 1.0				

1E VOLATILE ORGANICS ANALYSIS DATA SHEET TENTATIVELY IDENTIFIED COMPOUNDS

SAMPLE NO. SKGW261008

Lab Name: GCAL	_Contract:				
Lab Code: LA024 Case No.:		SAS No.:		SDG No.: 20	3111311
Matrix: Water		Lab Sample ID:	2031113112	1	
Sample wt/vol: Units:		Lab File ID:			
Level: (low/med)		Date Collected:	11/14/03	Time:	1240
% Moisture: not dec.		Date Received:	11/15/03	· · · · · · · · · · · · · · · · · · ·	7.5.5
GC Column: DB-624-30M ID: .53	(mm)	Date Analyzed:	11/18/03	Time:	2310
Instrument ID: MSV2		Dilution Factor:	1	Analyst	: RSP
Soil Extract Volume:	(µL)				
Soil Aliquot Volume:	(µL)				
Number TICs Found: 0 CONCENTRATION UNITS: CAS NO. COMPOUND		RT	EST.	CONC.	Q
1. No tics detected			<u> </u>		

COLATILE CRIGANING ANALYSIS SATA SHEET

Lab Name:	SCAL	Samble I SK	GW30100E		
	LA024 Case No.:	contract:			
Matrix: Wa				SDG No.: 203111	211
		·			
Sample wt/v	ol: 25 Units: miL	Lab Sample ID:	2031113712	2	
Level: (low/n	ned)	Lab File (D): 203	31118P/T0583	 	
% Moisture:	not dec.	Date Collected:	11/14/03	Time: 1015	
GC Column:	DB-624-30M ID: 53 (mm)	Date Received:	11/15/03		
Instrument 10	D: MSV2	Date Analyzed:	11/18/03	Time: 2109	
Concentrate	di Extract Volume: (µL)	Dilution Factor:	1	Analyst: HJL	
Soil Aliquot \					
CONCENT	TRATION UNITS: U01.	Analytical Method		-CLP Vo	
	•		_		
CAS NO	. COMPOUND	RESULT	Q	RL	
71-55-6	1,1,1-Trichloroethane	1.0	U	1.0	
79-34-5	1,1,2,2-Tetrach-proethane	1.3	U	1.0	
79-00-5	1,1,2-Trichloroemane		U	1.0	
75-34-3	1,1-Dichloroethane	1;	U	1.0	
75-35-4	1,1-Dichloroethene	- 3	U	1.0	
120-82-1	1,2,4-Trichlorobenzene	1.0	U	1.0	
106-93-4	1,2-Dibromoethane	1 3	U	1.0	
95-50-1	1,2-Dichlorobenzene	1.0	U	1.0	
107-06-2	1,2-Dichloroethane	1.0	U	1.0	
540-59-0	1,2-Dichloroethene	4.2	U	1.0	
78-87-5	1,2-Dichloropropane	1.3	U	1.0	
541-73-1	1,3-Dichlorobenzene	•.0	U	1.0	
106-46-7	1,4-Dichlorobenzene	*.0	U	1.0	
78-93-3	2-Butanone	5.0	Ü	5.0 R	
591-78-6	2-Hexanone	5.0	U	5.0	
108-10-1	4-Methyl-2-pentanone	5.0	U	5.0	
67-64-1	Acetone	5.0	U	5.0 R	
71-43-2	Benzene	1.0	U	1.0	
75-27-4	Bromodichioromethane	1.0	U	1.0	
75-25-2	Bromoform	.0	U	1.0	
74-83-9	Bromomethane	0	U	1.0	
75-15-0	Carbon disulfide	10 :	U	1.0	
56-23-5	Carbon tetrachionde	- 0	U	1.0	
108-90-7	Chlorobenzere	٠.٥	U	1.0	
75-00-3	Chloroethane	٠ ٦	U	1.0	
67-66-3	Chloroform	1.0	U	1.0	
74-87-3	Chloromethane	1.0	U	1.0	
124-48-1	Dibromoch:orometnane	0	U	1.0	
10061-01-5	cis-1,3-Dichtorooropene	. 0	U	1.0	
10061-02-6	trans-1,3-Dichoropropene	1.9	U	1.0	
100-41-4	Ethythenzene	•.0	U	1.0	
75-09-2	Methylene chloride	2.3	U	2.0	
100-42-5	Styrene	1 3	U	1.0	

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1A VOLATILE ORGANICS ANALYSIS DATA SHEET

Lab Name: GCAL	Sample ID: SKGW301008
Lab Code: LA024 Case No.;	Contract:
Matrix: Water	
Sample wt/vol: 25 Units: mL	Lab Sample iD: 20311131122
Level: (low/med)	Lab File ID: 2031.118P/T0583
% Moisture: not dec.	
	m) Date Received: 11/15/03
Instrument ID: MSV2	Date Analyzed: 11/18/03 Time: 2109
Concentrated! Extract Volume: (),	
Soil Aliquot Volume: ()	-) Prep Method:
CONCENTRATION UNITS: ug/L	Analytical Method: OLC02.1 - CLP Vo
CAS NO. COMPOUND	RESULT Q RL
127-18-4 Tetrachloroethene	1.0 U 1.0
108-88-3 Toluene	1.0 U 1.0
79-01-6 Trichloroethene	1.0 U 1.0
75-01-4 Vinyl chloride	1.0 U 1.0
1330-20-7 Xylene (total)	10 11 10



CLATIL TORGANIOS VINCHES BATA SHEET TENTAT VELMICENTITIED COMICUNOS

SAN	MALE.	NC.		
 	S- <gi< th=""><th>V30</th><th>1006</th><th></th></gi<>	V30	1006	

_				27GM201000
Lab Name: GCAL	_Coctract		<u></u>	
Lab Code: LA024 Case No.:		S4S No :	SDG No.:	203111311
Matrix: Water		Lab Sample D:	20311131122	
Sample wi/vol: Units:		_ab File ID _20	31118P/T0583	
Level: (low/med)		Date Collected:	11/14/03 Tam	e: 1015
% Moisture: not dec.		Date Received:	11/15/03	
GC Column: DB-624-30M 1D: .53	(mm)	Cate Analyzed:	11/18/03 Tim	e: 2109
Instrument ID: MSV2	~	Dilution Factor.	1 Ana	lyst HJL
Soil Extract Volume:	(µL)			
Soil Aliquot Volume:	(μL)			
Number TICs Found: 1				
CONCENTRATION UNITS				
CAS NO. COMPOUND		RT	EST. CONC.	Q
1. 7446-09-5 Sulfur dicorde		3.512	2.73	

1A VOLATILE ORGANICS ANALYSIS DATA SHEET

Lab Name: GCAL		Sample ID: SKGW611008				
Lab Code:	LA024 Case No.:	Contract:				
Matrix: Wa	ater	SAS No.: SDG No.: 203111311				
Sample wt/vo	ol: 25 Units: mL	Lab Sample ID:	20311131	123		
Levei: (low/m	ned)	Lab File ID: 20	31118P/T05	581		
	not dec.	Date Collected:	11/14/03	Time: 1	100	
	DB-624-30M ID: .53 (mm)	Date Received:				
instrument IC	2. MSV2			Time: 2	021	
	di Extract Volume: (µL)	•		Analyst:		
Soil Aliquot V		Prep Method:		Allaiyou	1100	
Soil Allquot v	/olume: (µL)	· · · · · · · · · · · · · · · · · · ·				
CONCENT	RATION UNITS: ug/L	Analytical Metho	d: OLC02	2.1 - CLP Vo		
CAS NO.	. COMPOUND	RESULT	Q	RL		
71-55-6	1,1,1-Trichloroethane	1.0	TU	1.0]	
79-34-5	1,1,2,2-Tetrachloroethane	1.0	Ü	1.0	i	
79-00-5	1,1,2-Trichloroethane	1.0	 	1.0	}	
75-34-3	1,1-Dichloroethane	1.0	1	1,0	}	
75-35-4	1,1-Dichloroethene	1.0	1 - 0	1.0		
120-82-1	1,2,4-Trichlorobenzene	1.0	1 - 0	1.0	{	
106-93-4	1,2-Dibromoethane	1.0	1 0	1.0	{	
95-50-1	1,2-Dichlorobenzene	1.0	 	1.0		
107-06-2	1.2-Dichloroethane	1.0	l Ü	1.0		
540-59-0	1,2-Dichloroethene	1.0	 U	1.0		
78-87-5	1,2-Dichloropropane	1.0	 	1.0		
541-73-1	1,3-Dichlorobenzene	1.0	1 0	1.0		
106-46-7	1,4-Dichlorobenzene	1.0	l ŭ	1.0		
78-93-3	2-Butanone	5.0	1 0	5.0	R	
591-78-6	2-Hexanone	5.0	l Ü	5.0	"	
108-10-1	4-Methyl-2-pentanone	5.0	l ü	5.0		
67-64-1	Acetone	5.0	U	5.0	ø	
71-43-2	Benzene	1.0	- 0	1.0	R	
75-27-4	Bromodichloromethane	1.0	Ū	1.0	1	
75-25-2	Bromoform	1.0	U	1.0		
74-83-9	Bromomethane	1.0	-	1.0		
75-15-0	Carbon disulfide	1.0	Ū	1.0		
56-23-5	Carbon tetrachloride	1.0	Ū	1.0		
108-90-7	Chiorobenzene	1.0	Ü	1.0		
75-00-3	Chloroethane	1.0	Ü	1.0		
67-66-3	Chloroform	1.0	U	1.0		
74-87-3	Chloromethane	1.0	U	1.0		
124-48-1	Dibromochloromethane	1.0	U	1.0		
	cis-1,3-Dichloropropene	1.0	U	1.0		
	trans-1,3-Dichloropropene	1.0	Ü	1.0		
100-41-4	Ethylbenzene	1.0	Ü	1.0		
75-09-2	Methylene chloride	2.0	Ü	2.0		
100-42-5	Styrene	1.0	Ü	1.0		
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VOLATILE CRISANIOS ANALII SISICIATA SHEET

Lab Name: GCAL	Sample ID SKGW 611008
Lab Code: LA024 Case No.:	Contract:
Matrix: Water	SAS No.: SDG No.: 203111311
Sample wt/vol: 25 Units: mL	Lab Sample ID: 20311131123
Level: (low/med)	Lab File (D 2031118P/T0581
% Maisture: not dec.	Date Collected: 11/1:4/03 Time: 1100
GC Column: 08-624-30M +D: .53 (mm	Date Received: 11/15/03
Instrument ID: MSV2	Date Analyzed: 11/18/03 Time: 2021
Concentrated Extract Volume: (µL	Citution Factor: 1 Analyst: HJL
Soil Aliquot Volume: [µL	Prep Method:
CONCENTRATION UNITS: ug/L	Analytical Method: OLC02.1 - CLP Vo
CAS NO. COMPOUND	RESULT Q RL
127-18-4 Tetrachloroethene	C U 1.0
106-88-3 Toluene	· 0 U 1.0
79-01-6 Trichloroethene	1.0 U 1.0
75-01-4 Vinyl chlonde	· C U 1.0
1330-20-7 Xylene (total)	1.0 U 1.0

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VOLATILE ORGANICS ANALYSIS DATA SHEET TENTATIVELY IDENTIFIED COMPOUNDS

SAMPLE NO.	
SKGW611008	

Lab Name: GCAL	_Contract:		·		
Lab Code: LA024 Case No.:	· · · · · · · · · · · · · · · · · · ·	SAS No.:	SD-	G No.: 20	03111311
Matrix: Water		Lab Sample ID:	20311131123		
Sample wt/vol: Units:		Lab File ID:			
Level: (low/med)	<u></u>	Date Collected:	11/14/03	Time:	1100
% Moisture: not dec.		Date Received:	11/15/03		
GC Column: DB-624-30M ID: .53	(mm)	Date Analyzed:	11/18/03	Time:	2021
Instrument ID: MSV2		Dilution Factor:	1	Analys	st: HJL
Soil Extract Volume:	(µL)				
Soil Aliquot Volume:	(µL)				
Number TICs Found: 0					
CONCENTRATION UNITS:					
CAS NO. COMPOUND		RT	EST. CC	DNC.	Q
1. No tics detected			I		

V**O**LATILE ORGANIOS AN ALASIS DIATA SHEET

Lat Name:	GCAL	Sample D SK	G.V 631006		
Lab Code:	LA024 Case No.:	Contract:			
Matrix: W	ater			SDG No.: 20311131	i 1
Sample wt/	rat: 25 Units: mL	Lab Sample ID:			
Level: (low)	Taril	Lab File (D: 20)	31118P/T058	7	
% Moisture:				Time: 1220	
				18110. 1220	
GC COlumn	DB-624-30M ID: _53 (mm)	Date Received:	11/15/03		
Instrument I	D: MSV2	Date Analyzed:	11/18/03	Time: 2246	
Concentrate	di Extract Volume: (µL)	Dilution Factor:	1	Analyst: HJL	
Soil Aliquot	Valume: (µL)	Prep Method:			
CONCENT	TRATION UNITS: ug/L	Analytical Methor	d: OLC02.1	- CLP Vo	
CAS NO	. COMPOUND	RESULT	Q	RL	
71-55-6	1,1,1-Trichloroethane	10	l u l	1.0	
79-34-5	1,1,2,2-Tetrachioroethane	10	U	1.0	
79-00-5	1,1,2-Trichloroethane	• 3	U	1.0	
75-34-3	1,1-Dichloroethane	- 0	U	1.0	
75-35-4	1,1-Dichloroethene	- 0	U	1.0	
120-82-1	1,2,4-Trichlorobenzene	1.0	U	1.0	
106-93-4	1,2-Dibromoethane	1.0	Ų	1.0	
95-50-1	1,2-Dichlarobenzene	1.3	Ü	1.0	
107-06-2	1,2-Dichloroethane	- 0	U	1.0	
540-59-0	1,2-Dichlaroether-e	1.3	U	1.0	
78-87-5	1,2-Dichloropropane	1.3	U	1.0	
541-73-1	1,3-Dichlorobenzene	10	U	1.0	
106-46-7	1,4-Dichlorobenzene	10	U	1.0	
78-93-3	2-Butanone	5.0	Ü	5.0 R	
591-78-6	2-Hexanone	5 0	U	5.0	
108-10-1	4-Methyl-2-pentanone	5.0	<u> </u>	5.0	
67-64-1	Acetone	5.0	<u> </u>	5.0 K	
71-43-2	Benzene	<u> </u>	U	1.0	
75-27-4	Bromodichioromethane	٠٥	U	1.0	
75-25-2	Bramoform	1.0	U	1.0	
74-83-9	Bromomethane	• 3	U	1.0	
75-15-0	Carbon disurfice		U	1.0	
56-23-5	Carbon tetrachionde	1.0	<u> </u>	1.0	
108-90-7	Chlorobenzere	10	U	1.0	
75-00-3	Chloroethane	• 0	U	1.0	
67-66-3	Chloroform	- 0	J	1.0	
74-87-3	Chloromethane	0	U	1.0	
124-48-1	Dibromochioromethane	1.0	U	1.0	
	cis-1,3-Dichloropropene	1.0	U	1.0	
	trans-1,3-Dichloropropene	0	U	1.0	
100-41-4	Ethylberizene	1.5	U	1.0	
75-09-2	Methylene chonde	2.0	U	2.0	
1 BL4 J.5	NAME OF THE OWNER OWNER OF THE OWNER OWNE	- (1		3.44	

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1A VOLATILE ORGANICS ANALYSIS DATA SHEET

Lab Name: GCAL Sample ID: SKGW631008				
Lab Code: LA024 Case No.:		Contract:		
Matrix: Water		SAS No.:		SDG No.: 203111311
Sample wt/vol: 25 Units: mL	Lab Sample ID:	2031113112	27	
Level: (low/med)		Lab File ID: 203	1118P/T058	7
% Moisture: not dec.		Date Collected:	11/14/03	Time: 1220
GC Column: DB-624-30M ID: .53		Date Received:	11/15/03	
Instrument ID: MSV2		Date Analyzed:	11/18/03	Time: 2246
Concentrated Extract Volume:		Dilution Factor:	1	Analyst: HJL
Soil Aliquot Volume:	_ (μL)	Prep Method:		
CONCENTRATION UNITS: ug/L		Analytical Method		
CAS NO. COMPOUND		RESULT	Q	RL
127-18-4 Tetrachloroethene	~~~~~	1.0	U	1.0
108-88-3 Toluene		1.0	U	1.0
79-01-6 Trichloroethene		1.0	U	1.0
75-01-4 Vinyl chloride		1.0	U	1.0
1330-20-7 (Xviene (total)		1.0	U	1.0

VOUATILE CROAN OS ANAU IN CATA SHEET TENTATURELY DENT TIED COMPOUNDS SKGW531008

S	MP	ĽΞ	NO.	

Lab Name: GCAL _____Contract:
 Lab Code:
 LA024
 Case No.:
 S4S No.:
 SDG No.:
 203111311
 Lab Sample ID: 20311131127 Matrix: Water Lab File ID: Sample wi/volt _____ Units: Date Collected: 11/14/03 Time: 1220 Level: (low/med) % Moisture: not dec. Date Received: 11/15/03 GC Column: D8-624-30M ID: .53 (mm) Date Analyzed: 11/18/03 Time: 2246 Dilution Factor: 1 Instrument ID: MSV2 Analyst HJL Soil Extract Volume: [µL) Soil Aliquot Volume: (µL) Number TICs Found: 0 **CONCENTRATION UNITS.** CAS NO. COMPOUND RT EST. CONC. Q

No tics detected

1A VOLATILE ORGANICS ANALYSIS DATA SHEET

Lab Name:	GCAL		Sample ID: Sh	(GW241008	·		
Lab Code:	LA024 Case No.:		Contract:				
Matrix: Wa	ater		SAS No.:		SDG No.: _:	203111311	
Sample wt/v	ol: 25 Units: mL		Lab Sample ID: 20311131128				
Level: (low/n	ned)		Lab File ID: 20	31118P/T05	589		
	not dec.		Date Collected:	11/14/03	Time:	1435	
	DB-624-30M ID: .53		Date Received:	11/15/03			
instrument IC	D: MSV2		Date Analyzed:	11/18/03	Time:	2334	
Concentrated Extract Volume: (µL)		Dilution Factor:	1	Analyst	: HJL		
Soil Aliquot Volume: (µL)							
	TRATION UNITS: ug/L		Analytical Metho				
CAS NO	. COMPOUND		RESULT	Q	RL		
71-55-6	1,1,1-Trichloroethane		1.0	U	1.0	7	
79-34-5	1,1,2,2-Tetrachloroethane		1.0	U	1.0	7	
79-00-5	1,1,2-Trichloroethane		1.0	Tu Tu	1.0	7	
75-34-3	1,1-Dichloroethane		1.0	U	1.0	7	
75-35-4	1,1-Dichloroethene		1.0	U	1.0	7	
120-82-1	1,2,4-Trichlorobenzene	 -	1,0	U	1.0	-	
106-93-4	1,2-Dibromoethane		1,0	 	1.0	┥	
95-50-1	1,2-Dichlorobenzene		1.0	1 0	1.0	7	
107-06-2	1,2-Dichloroethane		1.0	1 0	1.0		
540-59-0	1,2-Dichloroethene		1.0	Ü	1.0	┥	
78-87-5	1,2-Dichloropropane		1.0	U	1.0	-	
541-73-1	1,3-Dichlorobenzene		1.0	u	1.0		
106-46-7	1,4-Dichlorobenzene		1,0	T U	1.0	┥	
78-93-3	2-Butanone		5.0	U	5.0	TR.	
591-78-6	2-Hexanone		5.0	 	5.0	┥'`	
108-10-1	4-Methyl-2-pentanone		5.0	 	5.0	+	
67-64-1	Acetone		5.0	-	5.0	tr	
71-43-2	Benzene		1.0	u	1.0	Ⅎ'`	
75-27-4	Bromodichloromethane		1.0	- u	1.0	4	
75-25-2	Bromoform		1.0	Ü	1.0	┥ .	
74-83-9	Bromomethane		1.0	U	1.0	-1	
75-15-0	Carbon disulfide		1.0	Ū	1.0	4	
56-23-5	Carbon tetrachloride		1.0	U	1.0	7	
108-90-7	Chlorobenzene		1.0	U	1.0	1	
75-00-3	Chloroethane	·	1.0	U	1.0	1	
67-66-3	Chloroform		1.0	υ	1.0	1	
74-87-3	Chloromethane		1.0	Ü	1.0	1	
124-48-1	Dibromochloromethane		1.0	Ü	1.0	1	
10061-01-5	cis-1,3-Dichloropropene		1.0	Ū	1.0	1	
10061-02-6	Irans-1,3-Dichloropropene		1.0	Ü	1.0	†	
100-41-4	Ethylbenzene		1.0	Ü	1.0	1	
75-09-2	Methylene chloride		2.0	Ü	2.0	1	
100-42-5	Styrene		1.0	Ü	1.0	1	
	1-7		1	1		1	

1112/0/20

VOLAT LE GRIGANIOS : ALHE SIGRTA SHEET

Lab Name GCAL	amble D. SKGW 241008					
Lab Code: LA024 Case No.:	Sontrac:					
Matrix: Water	SAS No SDG No.: 203111311					
Sample w/volt: 25 Units. mil.	Lab Sample D: 20311131128					
Level: (low/med)	Lab File (D: 2031118P/TG589					
% Moisture: not dec.	Date Collected: 11/14/03 Time: 1435					
GC Column: DB-624-30M ID: 53 (mm)	Date Received: 11/15/03					
instrument ID: MSV2	Date Analyzed: 11/18/03 Time: 2334					
Concentrated Extract Volume: (µL)	Dilution Factor: 1 Analyst: HJL					
Soil Aliquot Volume: (µL)	Prep Method:					
CONCENTRATION UNITS: Ug/L	Analytical Method: OLC02.1 - CLP Vo					
CAS NO. COMPOUND	RESULT Q RL					
127-18-4 Tetrachicroethere	1.0 U 1.0					
108-88-3 Toluene	1.0 U 1.0					
79-01-6 Trichloroethene	1.0 U 1.0					
75-01-4 Vinyl chlonde	1.0 U 1.0					
1330-20-7 Xylene (total)	· : U 1.0					

1E

VOLATILE ORGANICS ANALYSIS DATA SHEET TENTATIVELY IDENTIFIED COMPOUNDS

SAMPLE NO.	
SKGW241008	

Lab Name: GCAL	_Contract:				
Lab Code: LA024 Case No.:		SAS No.:	SDG	No.: 203	111311
Matrix: Water		Lab Sample ID:	20311131128		
Sample wt/vol: Units:		Lab File ID:			
Level: (low/med)		Date Collected:	11/14/03	Time: _1	1435
% Moisture: not dec.		Date Received:	11/15/03		
GC Column: DB-624-30M (D: .53	(mm)	Date Analyzed:	11/18/03	Time: 2	2334
Instrument ID: MSV2		Dilution Factor:	1	Analyst:	HJL
Soil Extract Volume:	(µL)				
Soil Aliquot Volume:	(µL)				
•	•				
Number TICs Found: 0					
CONCENTRATION UNITS:					
CAS NO. COMPOUND		RT	EST. CO	NC.	Q
1. No tics detected			I		

NOUST LE CROSSICIONALIS SICIATA SHEET

Lac Name:	GCAL	Sample D SK	GW"B1068	
Lab Code:	Case No.:	Contract		
Matrix W				SDG No.: 203111311
Sample wiv	rolt 25 Units: mL	Lat Sample ID:	2031113112)
Level: (low)	med)	Lab File D: 20:	31118P/T0582	·
% Moisture:	not dec.	Date Collected:	11/14/03	Time: 0000
GC Column	: D8-624-30M (D:53 mm)	Date Received:	11/15/03	
instrument i	D: MSV2	Date Analyzed:	11/18/03	Time: 2045
Concentrate	di Edract Volume: (al.)	Dilution Factor:	1	Analyst HJL
Soil Aliquot	Volume: (µL)	Prep Method:		
	TRATION UNITS: ug/L	Analytical Metho		CLP Vo
CAS NO). COMPOUND	RESULT	Q	RL
71-55-6	1,1,1-Trichloroethane	1 10	<u> </u>	1.0
79-34-5	1.1.2.2-Tetrachioroethane	1.2	 	1.0
79-00-5	1,1,2-Trichloroethane	1.3	U	1.0
75-34-3	1,1-Dichioroethane	 	U	1.0
75-35-4	1.1-Dichioroethene		 	1.0
120-82-1	1.2.4-Trichloroberizene	1.0	Ü	1.0
106-93-4	1.2-Dibromoethane	1,5	Ü	1.0
95-50-1	1,2-Dichlorobenzene	4	Ü	1.0
107-06-2	1.2-Dichloroethane	1:	U	1.0
540-59-0	1.2-Dichloroethene	- (U	1.0
78-87-5	1.2-Dichloropropane	+	U	1.0
541-73-1	1,3-Dichlorobenzene	1.0	U	1.0
106-46-7	1.4-Dichlorobenzene	1.0	U	1.0
78-93-3	2-Butanone	5.0	U	
591-78-6	2-Hexanone	5.C	U	5.0
108-10-1	4-Methyl-2-pentanone	5.C	U	5.0
67-64-1	Acetone	5.C	บ	5.0 R
71-43-2	Benzene	1.0	Ü	1.0
75-27-4	Bromodichloromethane	1.0	U	1.0
75-25-2	Bromoform	10	U	1.0
74-83-9	Bromomethane	1.0	L	1.0
75-15-0	Carbon disutfide	1.0	U	1.0
56-23-5	Carbon tetrachionde	1.0	U	1.0
108-90-7	Chlorobenzene	1.0	U	1.0
75-00-3	Chloroethane	7.0	U	1.0
67-66-3	Chloroform	1.0	U	1.0
74-87-3	Chloromethane	1.0	U :	1.0
124-48-1	Dibromochloromethane	1.0	U	1.0
10061-01-5	cis-1,3-Dichloropropene	1.0	U	1.0
10061-02-6	trans-1,3-Dichloropropene	1.0	U	1.0
100-41-4	Ethylbenzene	1.0	U	1.0
75-09-2	Methylene chlonde	2.0	U	2.0
100 42 5	Change	1.5	- 11	40

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1A VOLATILE ORGANICS ANALYSIS DATA SHEET

Lab Name: GCAL	Sample ID: SKGWTB1008					
Lab Code: LA024 Case No.:	Contract:					
Matrix: Water	SAS No.: SDG No.: 203111311					
Sample wt/voi: 25 Units: mL	Lab Sample ID: 20311131129					
Level: (low/med)	Lab File ID: 2031118P/T0582					
% Moisture: not dec.	Date Collected: 11/14/03 Time: 0000					
GC Column: DB-624-30M ID: .53 (mm)	Date Received: 11/15/03					
Instrument ID: MSV2	Date Analyzed: 11/18/03 Time: 2045					
Concentrated Extract Volume: (µL)	Dilution Factor: 1 Analyst: HJL					
Soil Aliquot Volume: (µL)	Prep Method:					
CONCENTRATION UNITS: ug/L	Analytical Method: OLC02.1 - CLP Vo					
CAS NO. COMPOUND	RESULT Q RL					
127-18-4 Tetrachloroethene	1.0 U 1.0					
108-88-3 Toluene	1.0 U 1.0					
79-01-6 Trichloroethene	1.0 U 1.0					
75-01-4 Vinyl chloride	1.0 U 1.0					
1330-20-7 Xylene (total)	1.0 U 1.0					

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CLATILE ORGANIOS ANALYSIS DATA SHEET

SAMPLE	NO.
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· · · · · · · · · · · · · · · · · · ·	.14TNELM DE	ENTIFIED COMPOUN	.os	SK	GWTB1008
Lab Name: GCAL	Contract	-			
Lab Code: LA024 Case No :		S4S No.:	s	DG No.: 20	3111311
Matrix: Water	<u>.</u>	Lati Sample ID:	20311131129		·
Sample wivot: Units:		Lab File :D:			
Level: (low/med)		Date Collected:	11/14/03	Time:	0000
% Moisture: not dec.		Date Received:	11/15/03		····
GC Column: <u>D8-624-30M</u> D: <u>53</u>	(mrr.)	Date Analyzed:	11/18/03	Time:	2045
Instrument IO: MSV2		Dilution Factor:	1	Analysi	: HJL
Soil Extract Volume:	(µL)				
Soil Aliquot Volume:	(μL)				
Number TICs Found: 1 CONCENTRATION UNITS:			-		
CAS NO. COMPOUND		RT	EST. C	ONC.	Q
1. No tics detected			1		

U.S. EPA - CLP COVER PAGE - INORGANIC ANALYSES DATA PACKAGE

ab Name:	GCAL		(Contract:		······		
ab Code:	LA024	Ca	se No.:	SAS No.:			SDG No.:	203111311
SOW No.:								
			EPA Sample No.		Lab Samp	ole ID.		
1			SKGW07R1008		2031113110)1		
			SKGW06R1008		2031113110)2		
			SKGW591008		2031113110	3		
			SKGW601008		2031113110)4		
			SKGW62A1008		2031113110	5		
			SKGW641008		2031113110	6		
			SKGW07R1008 (DISS)		2031113110	8		
			SKGW06R1008 (DISS)		2031113110	9	•••••	
		<u>(</u> r, 0	SKGW591008 (DISS)	nphyspiranos	2031113111	0		
			SKGW601008 (DISS)		2031113111	1		
			SKGW62A1008 (DISS)		2031113111	2		
			SKGW641008 (DISS)		2031113111	3		
			SKGW581008	***************************************	2031113111	4		
			SKGW58FD1008		2031113111	5		
			SKGWFB1008	*********	2031113111	6		
		Were	tCP interelement corrections applie	ed ?	Yes / No	YES		
		Were	ICP background corrections applie	:d ?	Yes / No	YES		
			If yes-were raw data generated bef	ore			•••	
		ŧ	application of background correction	s?	Yes / No	NO		
Comment	s:	· · · · · · · · · · · · · · · · · · ·						
	· ··			 -		· · · · · · · · · · · · · · · · · · ·		
المراق والمراق	-444:1-4-	! ;			of the contract	hadh taali	anianih , anal	for a smalleton and for
other than	n the condit nitted on th	ions detaile	s in compliance with the terms and one above. Release of this data contains been authorized by the Laborato	ined in this	hardcopy data	ı package	and in the o	computer readable
6 : 1	اعطا	00	South as helled the seasons of	a	Sia -1	1	Sal 11000	m] t
Signature	:_ <u>\\ \\ \\ \\ \\ \\ \\ \\ \\ \\ \\ \\ \\</u>	weer 1	port & Chil	ti jeje Na	ame: <u>Shel</u> tle: <u>Inorg</u>	iey C	uurge.	UIS
Date::	13/13	103	· · · · · · · · · · · · · · · · · · ·	Tit	ile: <u>Inorg</u>	anc	Manag	ger
			COVER P	AGE - IN	1			ILMO4.1

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ab Name:	GCAL			Contract:				
ab Code:	LA024	Ca	ise No.	SAS No.:			SDG No.:	203111311
		-						
		4.	EPA Sample No.		Lab Samp	de ID.		
		-	SKGW581008 (DISS)		2031113111	8		
			SKGW58FD1008 (DISS)		2031113111	9	_	
			SKGWFB1008 (DISS)		2031113112	0		
			SKGW261008		2031113112	1	_	
			SKGW301008		2031113112	2		
		7	SKGW611008		2031113112	3	_	
			SKGW611006 MS		2031113112	4		
			SKGW611006 DUP		2031113112	6		
			SKGW631008		2031113112	7		
			SKGW241008		2031113112	8		
			SKGW261006 (DISS)		2031113113	0		
			SKGW301008 (DISS)		2031113113	1		
		q	SKGW611008 (DISS)		2031113113	2		
		•	SKGW611008 MS (DISS)		2031113113	3		
			SKGW611006 DUP (DISS)		2031113113	4	·········	
		Wer	e ICP interelement corrections appi	ed ?	Yes / No	YES		
			e ICP background corrections appli		Yes / No	YES		
			If yes-were raw data generated be		232		_	
			application of background corrector	ns ?	Yes / No	NO	-	
Comment	s :							
								
other than	n the conditi mitted on the	ions detail	is in compliance with the terms and ed above. Release of this data contr has been authorized by the Laborate	ened in this	hardcopy data	package	and in the	computer readable
•		Dent	anzer	N	ame: She	lley f	Sourge	ois
Date:	12/12	05		Ti	ame: She ide: Inon	ار مه	Man	noer
		- 				۱۰۰۰۰۱۱ کا ۱۱۰۰۱۱ کا ۱۱۰۰۱۱ کا ۱۱۰۰۱۱ کا ۱۱۰۱۱ کا ۱		J

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U.S. EPA - CLP COVER PAGE - INORGANIC ANALYSES DATA PACKAGE

ab Name:	GCAL		Contract:			
ab Code:	LA024	Case No.:	SAS No.:		SDG No.:	203111311
OW No.:						
		EPA Sample No.		Lab Sample ID 20311131135		
		SKGW631008 (DISS) SKGW241008 (DISS)		20311131136		
						
		•				
		•				
• .	. ••					
		Were ICP interelement corrections appli	ied ?	Yes / No YES	3	
		Were ICP background corrections applied if yes-were raw data generated be		Yes / No YES	<u> </u>	
		application of background correction		Yes / No NO		
Comment	s:					
						
					· · · · · · · · · · · · · · · · · · ·	
	·					· · · · · · · · · · · · · · · · · · ·
other than	n the condition mitted on the	ackage is in compliance with the terms and ns detailed above. Release of this data cont diskette has been authorized by the Laborate	ained in this	s hardcopy data pack	age and in the co	mputer readable
other than data subn signature.	n the condition	ns detailed above. Release of this data conta	ained in this ory Manage	s hardcopy data pack er or the Manager's de	age and in the co esignee, as verifi	omputer readable ed by the following
other than	n the condition	ns detailed above. Release of this data conta	ained in this ory Manage	s hardcopy data pack	age and in the co esignee, as verifi	omputer readable ed by the following

EPA SAMPLE NO.

SKGW	IN7R 1	IOOR	

		TO SHING PINES C	. 5 0 10		W07R1008	Ì
Lab Name: (GCAL	Con:	rast:			
Lab Code: L	A024 Case No.:	248	No	SDG N	io.: <u>2031113</u>	l1
Matric (soi / w	valer) Water	. Lab Sar	mple (D	11131101		
Levet (low / m	ed)	Date R	eceived: 11/1	3/03		
% Solida:						
Concentration	Units (ug/L or mg/kg dry weig	nt); ug/L				
CAS No.	Analyte	Concentration	С	Q	М	
7440-36-0	Antimony	3.7	U	<u> </u>	Р	
7440-38-2	Arsenic	5.3	В		Р	
7440-39-3	8arium	204			P	

7440-38-2	Arsenic	5.3	В		P	1
7440-39-3	8arium	204			P	1
7440-41-7	Beryllium	0.1	U		P	7
7440-43-9	Cadmium	0.2	Ü		P	7
7440-47-3	Chromium	4.9	В		P	7
7440-50-8	Copper	10.0	В		P	7
7439-89-6	Iron	9890			P	٦
7439-92-1	Lead	5.2		_	Р]
7439-97-6	Mercury	0.1	J		AV	٦
7440-02-0	Nickel	10.5	В		Р	٦.
7782-49-2	Selenium	4.4	J	N	P	_ uz
7440-22-4	Silver	0.4	J		P	٦
7440-28-0	Thallium	2.6	Ú		Р	7
7440-66-6	Zinc	22.7			Ρ	「 て
57-12-5	Cyanide	3.0	U		AS	7

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Color Before:	LT.BROWN	Clarity Before	CLEAR	Texture:	
Color After:	LT.BROWN	Clanty After:	CLEAR	Artifacts:	
Comments:					

U.S. EPA - CLP

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EPA SAMPLE NO.

INORGANIC AN	ALYSIS D	DATA:	SHEET
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	1	NORGANIC ANALYSIS	S DATA SHEET		06R1008
Lab Name: _G	CAL	Cont	ract:	<u></u>	
Lab Code: LA	024 Case No.:	SAS	No.:	SDG No.	: 203111311
Matrix: (soil / w	ater) Water	Lab Sai	mple ID: _20311	131102	
Level: (low / ma	ed)	Date R	eceived: 11/13	/03	
% Solids:			***************************************	······································	
	Units (ug/L or mg/kg dry weight				
CAS No.	Analyte	Concentration	С	Q	M
7440-36-0	Antimony	3.7	U		Р
7440-38-2	Arsenic	20.5			Р
7440-39-3	Barium	568			Ρ
7440-41-7	Beryllium	1.2	В		P
7440-43-9	Cadmium	0.2	U		Р
7440-47-3	Chromium	27.0			Р
7440-50-8	Copper	52.1			Р
7439-89-6	Iron	45400			P

U

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U

U

U

46.0

0.1

41.2

4.4

0.4

2.6

147

3.0

7439-92-1

7439-97-6

7440-02-0

7782-49-2

7440-22-4

7440-28-0

7440-66-6

57-12-5

Lead

Mercury

Nickel

Silver

Zinc

Selenium

Thallium

Cyanide

1115/07

ijΣ

ΑV

P

Р

P

P

P

AS

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Color Before:	LT.BROWN	Clarity Before:	CLEAR	Texture:	
Color After:	LT.BROWN	Clarity After:	CLEAR	Artifacts:	
Comments:					

		PNORGANIO ANALY	. 8 0474 8	HEET ;	SKGWS	91008
ab Name: G	CAL	c-	ontract:			
ab Code: UA	C24 Case No.;	SA	AS No.:		SDG No.:	203111311
Azerioc (soil / wa	oter) Water	. Lac	Sample (D: _2	20311131103		
.evel: (low / me	d)	Date	Received:	11/13/03		
6 Solids:				-		
Concentration (U nits (ug/L or mg/kg dry weig	ht). ug·1.				
CAS No.	Analyte	Concentration	C	(1	M
440-36-0	Antimony	37	J			Р
440-38-2	Arsenic	43	3			Р
440-39-3	Barium	213				Р
440-41-7	Beryllium	0.1	J			Р
440-43-9	Cadmium	0.2	J			Р
140-47-3	Chromium	19.1				Р
140-50-8	Copper	11.9	3			Р
139-89-6	iran	12900				Р
139-92-1	Lead	•c ɔ				Ρ
39-97-6	Mercury	3.1	J			AV
40-02-0	Nickel	20.0	В			P
182-49-2	Selenium	4.4	· ·	1	v .	P UJ
140-22-4	Silver	0.4	- ا - ا - ا - ا - ا - ا - ا - ا - ا - ا			Р
140-28-0	Thellium	26	Ü			Р
140-66-6	Zinc	36.3				P
7-12-5	Cyanide	3.0	U			AS
						المراديان م
olor Before: olor After:	LT.YELLOW	Clarity Before	CLEAR CLEAR		Texture:	
omments:						

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U.S. EPA - CLP

EPA SAMPLE NO.

7440-38-2 Arsenic 11.7 P 7440-39-3 Barium 89.8 B P 7440-41-7 Beryllium 0.9 B P 7440-43-9 Cadmium 0.2 U P 7440-47-3 Chromium 33.2 P 7440-50-8 Copper 29.3 P 7439-89-6 Iron 31300 P 7439-92-1 Lead 28.2 P 7440-92-0 Nickel 31.6 B P 7440-02-0 Nickel 31.6 B P 7440-22-4 Silver 0.4 U N P 7440-28-0 Thallium 2.6 U P 7440-66-6 Zinc 135 P 3	Lab Code: LA024 Case No.: SAS No.: SDG No. 203111311 Matrix: (soil / water) Water Lab Sample ID: 20311131104 Level: (low / med) Date Received: 11/13/03 % Solids: Concentration Units (ug/L or mg/kg dry weight): Ug/L CAS No. Analyte Concentration C Q M 7440-36-0 Antimory 3.7 U P P 7440-38-2 Arsenic 11.7 P P 7440-39-3 Barium 89.8 B P 7440-41-7 Beryllium 0.9 B P 7440-43-9 Cadmium 0.2 U P 7440-47-3 Chromium 33.2 P P 7440-50-8 Copper 29.3 P P 7439-89-6 Iron 31300 P P 7439-99-1 Lead 28.2 P P 7439-99-6 Mercury <	Lab Code: LA024 Case No.: SAS No.: SDG No.: 203111311 Matrix: (soil / water) Water Lab Sample ID: 20311131104 Level: (low / med) Date Received: 11/13/03 % Solids: Concentration Units (ug/L or mg/kg dry weight): ug/L CAS No. Analyte Concentration C Q M 7440-38-0 Antimony 3.7 U P 7440-38-2 Arsenic 11.7 P 7440-39-3 Barium 89.8 B P 7440-41-7 Beryllium 0.9 B P 7440-43-9 Cadmium 0.2 U P 7440-47-3 Chromlum 33.2 P P 7439-98-6 Iron 31300 P P 7439-92-1 Lead 28.2 P P 7439-97-6 Mercury 0.1 U N P 7440-02-0 Nickel 31.6		41	IORGANIC ANALYSIS	DATA SHEET	SKGW	/601008
Matrix: (soil / water) Water Lab Sample ID: 20311131104 Level: (low / med) Date Received: 11/13/03 % Solids: Concentration Units (ug/L or mg/kg dry weight): ug/L CAS No. Analyte Concentration C Q M 7440-36-0 Antimory 3.7 U P 7440-38-2 Arsenic 11.7 P P 7440-39-3 Barium 89.8 B P 7440-41-7 Beryllium 0.9 B P 7440-41-7 Beryllium 0.2 U P 7440-41-7 Beryllium 0.2 U P 7440-41-7 Beryllium 0.2 U P 7439-9-8 Colpier 29.3 P P 7439-9-8 Iron 31300 P P 7439-9-9-6 Mercury	Matrix: (soil / water) Water Lab Sample ID: 20311131104 Level: (low / med) Date Received: 11/13/03 % Solids: Concentration Units (ug/L or mg/kg dry weight): ug/L CAS No. Analyte Concentration C Q M 7440-36-0 Antimory 3.7 U PP 7440-38-2 Arsenic 11.7 PP 7440-39-3 Barium 89.8 BPPP 7440-41-7 Beryllium 0.9 BPPPP 7440-43-9 Cadmium 0.2 U PPPPPPPPPPPPPPPPPPPPPPPPPPPPPPPPPPP	Matrix: (soil / water) Water Lab Sample ID: 20311131104 Level: (low / med) Date Received: 11/13/03 % Solids: Concentration Units (ug/L or mg/kg dry weight): ug/L CAS No. Analyte Concentration C Q M 7440-36-0 Antimony 3.7 U PP 7440-38-2 Arsenic 11.7 PP 7440-39-3 Barium 89.8 B PP 7440-41-7 Beryllium 0.9 B PP 7440-43-9 Cadmlum 0.2 U PP 7440-47-3 Chromium 33.2 PP 7440-50-8 Copper 29.3 PP 7439-99-6 Iron 31300 PP 7439-99-1 Lead 28.2 PP 7439-97-6 Mercury 0.1 U AV 7440-20-0 Nickel 31.6 B PP 7440-22-4 Siliver 0.4 U PP 7440-22-4 Siliver 0.4 U PP 7440-26-6 Zinc 135 PP 7440-66-6 Zinc 135 PP	Lab Name: GC	AL	Contra	act:		
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7782-49-2 Selenium 4.4 U N P US V P US V P US V P US V P V V P V V N P V V P V V N P V V N P V V N P V N N N N N	7782-49-2 Selenium 4.4 U N P US VS VS	7782-49-2 Selenium 4.4 U N P 7440-22-4 Silver 0.4 U P 7440-28-0 Thallium 2.6 U P 7440-66-6 Zinc 135 P 57-12-5 Cyanide 3.0 U AS		 			·- · · · · · · · · · · · · · · · · · ·	
7440-22-4 Silver 0.4 U P 7440-28-0 Thallium 2.6 U P 7440-66-6 Zinc 135 P 757-12-5 Cyanide 3.0 U AS	7440-22-4 Silver 0.4 U P 7440-28-0 Thallium 2.6 U P 7440-66-6 Zinc 135 P 757-12-5 Cyanide 3.0 U AS	7440-22-4 Silver 0.4 U P 7440-28-0 Thallium 2.6 U P 7440-66-6 Zinc 135 P 757-12-5 Cyanide 3.0 U AS						
7440-28-0 Thallium 2.6 U P 7440-66-6 Zinc 135 P 757-12-5 Cyanide 3.0 U AS	7440-28-0 Thallium 2.6 U P 7440-66-6 Zinc 135 P 77-12-5 Cyanide 3.0 U AS	7440-28-0 Thallium 2.6 U P 7440-66-6 Zinc 135 P 757-12-5 Cyanide 3.0 U AS					N	
7440-66-6 Zinc 135 P 57-12-5 Cyanide 3.0 U AS	7440-66-6 Zinc 135 P 57-12-5 Cyanide 3.0 U AS	7440-66-6 Zinc 135 P 57-12-5 Cyanide 3.0 U AS		}				
57-12-5 Cyanide 3.0 U AS	57-12-5 Cyanide 3.0 U AS	57-12-5 Cyanide 3.0 U AS			· · · · · · · · · · · · · · · · · · ·			
					 	- i		
ilist of the	il. Karak	il. 5/134	37-12-3		3.0	<u>`</u> L		
								iles 134
		·						

Color Before:	LT.BROWN	Clarity Before:	CLEAR	Texture:	
Color After:	LT.BROWN	Clarity After:	CLEAR	Artifacts:	

Comments:

NORGANIO ANALIRE DATA SHEET

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					SKGW6	2A1008
Lab Name: _G	CAL		Contract:		<u></u>	
Lab Code: LA	NO24 Case No.:		S÷S No.		SDG No.:	203111311
Matric (soil/w	ester) Water	La.	o Sample (D)	20311131105		
Level: (low / me	sd)	Da	ate Received:	11/13/03		
% Solids:	,					
Concentration	Units (ug/L or mg/kg dry weigt	x), ∪g/L				
CAS No.	Arayte	Concentration	27 3		a	M
7440-36-0	Antimony	3.7				Р

CAS No.	Analyte	Concentration	:	Q	М	7
7440-36-0	Antimony	3.7			P	7
7440-38-2	Arsenic	•7.7		-	Ρ	7
7440-39-3	Barium	533	1		Р	7
7440-41-7	Beryllium	1.5	8		Р	7
7440-43-9	Cadmium	1.1	3	-	ρ	1
7440-47-3	Chromium	49.5			Р	7
7440-50-8	Copper	72.8			Р	1
7439-89-6	Iran	60800			P	7
7439-92-1	Lead	72.8			P	7
7439-97-6	Mercury	0.1	Ų		AV	7
7440-02-0	Nicial	64 3			Р	7
7782-49-2	Selenium	4.4	U	N	ρ	∃u¹
7440-22-4	Silver	0.4	IJ		Р	
7440-28-0	Thallium	2.6	Ų		Р	_
7440-66-6	Zinc	181			Р	- 3
57-12-5	Cyanide	3.0	U		AS	_

Color Before:	DR.BROWN	Clarity Before:	CLEAR	Texture	
Color After:	DR.BROWN	Clarity After:	CLEAR	Artifacts:	

Comments:

U.S. EPA - CLP

EPA SAMPLE NO.

INORGANIC	ANALYSIS	DATA	SHEET
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SKGW641008	
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					SNGWO	41006	i
Lab Name:	GCAL		Contract:				
Lab Code:	LA024	Case No.:	SAS No.:		SDG No.:	203111311	
Matrix: (soil	i / water)	Water	Lab Sample ID:	20311131106			
Level: (low	/ med)		Date Received:	11/13/03			
% Solids:							
0	ia- I laita /		uall				

CAS No.	Analyte	Concentration	С	Q	М	}
7440-36-0	Antimony	3.7	U	 	Р	1
7440-38-2	Arsenic	10.8			Р	1
7440-39-3	Barium	95.9	В		Р	1
7440-41-7	Beryllium	1.0	В		Р	1
7440-43-9	Cadmium	0.2	U		P	1
7440-47-3	Chromium	29.4			Р	1
7440-50-8	Copper	16.3	В		Р	1
7439-89-6	iron	42900			P	1
7439-92-1	Lead	20.0			P	1
7439-97-6	Mercury	0.1	U		AV	1
7440-02-0	Nickel	46.0			Р	1
7782-49-2	Selenium	4.4	U	N	Р	1 u
7440-22-4	Silver	0.4	U		Р	1
7440-28-0	Thallium	2.6	U		Р	1
7440-66-6	Zinc	114			Р	13
57-12-5	Cyanide	3.0	υ		AS	1

Color Before:	LT.BROWN	Clarity Before:	CLEAR	Texture:	
Color After:	LT.BROWN	Clarity After:	CLEAR	Artifacts:	
Comments:					

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EP4 SAMPLE NO.

NURBANIC ANA SIS DATA SHEET

SKGW07R1008 (DISS)

Lab Name: GCAL	Contract:	
Lab Code: LA024 Case No.:	54 S No -	SDG No.: 203111311
Matric (soil / water) Water	Lat Sample ID 20311131108	
Level: (low / med)	Date Received: 11/13/03	
% Solids:		

Concentration Units (ug/L or mg.lkg dry weight):

ug/L

CAS No.	Analyte	Concentration	C	Q	М
7440-36-0	Antimony	37	J	·	Р
7440-38-2	Arsenic	45	3		P
440-39-3	Barium	131	3	_	Р
7440-41-7	Beryttium	6.1	J		P
7440-43-9	Cadmium	02	J		Р
7440-47-3	Chromium	C 8	J		Р
7440-50-8	Copper	1.2	J	_	Р
7439-89-6	Iron	3580			Р
7439-92-1	Leed	! 5	J		Р
7439-97-6	Mercury	0.1	J		AV
7440-02-0	Nickel	16	3		Р
7782-49-2	Selenium	44	j	N	Р
7440-22-4	Silver	2.4	J		Р
7440-28-0	Thallium	2.5	J	N	P
7440-66-6	Zinc	30 7			Р

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Color Before:	COLORLESS	Clarity Before	CLEAR	Texture:	
Color After:	COLORLESS	Clarity After	CLEAR	Artifacts:	
Comments:					

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EPA SAMPLE NO.

	"	ORGANIC ANALYSI	DAIR GREET		W06R1008 (DISS
Lab Name: _G	CAL	Cont	ract:		
Lab Code: LA	024 Case No.:	SAS	No.:	SDG N	lo.: 203111311
Matrix: (soil / wa Level: (low / me			mple ID:		
6 Solids:	Jnits (ug/L or mg/kg dry weight)	; ug/L	:		
CAS No.	Analyte	Concentration	С	Q	M
7440-36-0	Antimony	3.7	U		P
440-38-2	Arsenic	2.9	Ü		Р
440-39-3	Barium	294			P
440-41-7	Beryllium	0.1	U		P
440-43-9	Cadmium	0.2	U		Р
440-47-3	Chromium	0.8	U	,	Р
440-50-8	Copper	1.7	В		Р
7439-89-6	Iron	14,1	U		P
439-92-1	Lead	1.5	U		Р
439-97-6	Mercury	0.1	U		AV
439-97-0	- 1	1.8	В	<u></u>	Р
	Nickel	1.0			
440-02-0	Nickel Selenium	4.4	U	N	PR
7440-02-0 782-49-2			U	N	PR
7440-02-0 7782-49-2 7440-22-4 7440-28-0	Selenium	4.4		N N	

	COLORLESS	Clarity Before:	CLEAR	Texture:	
Color After:	COLORLESS	Clarity After:	CLEAR	Artifacts:	

Comments:

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EP# SAMPLE NO.

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SK	CW	เดาก	NR IT	1221

Lab Name: GCAL	Contract:	
Lab Code: LA024 Case N	c: SAS No.:	SDG No.: 203111311
Matrix: (soil / water) Water	Lab Sample ID	
Level: (low / med)	Date Received: 11/13/03	_
% Solids:		•

Concentration Units (ug/L or mg/kg dry weight)

ug/L

CAS No.	Analyte	Concentration	2	Q	М
7440-36-0	Antimony	5.5	3		Р
7440-38-2	Arsenic	2.9	ij.		Р
7440-39-3	Barium	30 °	3		P
7440-41-7	Beryllium	31	ن		Р
7440-43-9	Cadmium	0.2	Ü		Р
7440-47-3	Chromium	3.8	Ú	<u> </u>	Р
7440-50-8	Copper	40	3		P
7439-89-6	kron	.4.	Ü		P
7439-92-1	Leed	1.5	3		Р
7439-97-6	Mercury	0.1	Ŀ		ÄV
7440-02-0	Nickel	2.3	В		Р
7782-49-2	Seienium	4.4	Ü	N	Р
7440-22-4	Silver	0.4	J		Р
7440-28-0	Thallium	2.6	j	N	P
7440-66-6	Zinc	3.6	J		Р

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Color Before:	COLORLESS	Clarity Before:	CLEAR	Texture:	
Color After:	COLORLESS	Clarity After	CLEAR	Artifacts:	

Convenents:

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EPA SAMPLE NO.

INORGANIC ANALYSIS DATA SHEE	INORGANIC	ANALYSIS	DATA	SHEET
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Level: (low / me	ed)	Date Rec	ole ID: 2031113 eived: 11/13/03			······································
% Solids:			-			
CAS No.	Units (ug/L or mg/kg dry weig	ht): ug/L Concentration	c	Q	М	7
						}
7440-36-0 7440-38-2	Antimony	3.7	บ U		P	-
7440-36-2 7440-39-3	Arsenic Barium	28.7	В В		- P	┧
7440-39-3 7440-41-7	Beryllium	0,1			- -	1
7440-43-9	Cadmium	0.2	U		P	1
7440-47-3	Chromium	0.8	- ŭ -		- P	1
7440-50-8	Copper	4.2	В		P	1
7439-89-6	Iron	14.1	U		Р	†
7439-92-1	Lead	1.5	U		P	1
7439-97-6	Mercury	0.1	U		AV	1
7440-02-0	Nickel	0.7	U		Р	1
7782-49-2	Selenium	4.4	U	N	Ρ	R
7440-22-4	Silver	0.4	U		Р]
7440-28-0	Thallium	2,6	Ü	N	P	UI
7440-66-6	Zinc	0.6	U		Р	us
7440-66-6	Zinc	0.6	U			lus Ilus mi

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CLEAR

Clarity After:

Color After:

Comments:

COLORLESS

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Artifacts:

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EPA SAMPLE NO.

MORGANIO ANALIASIS DATA SHEET

SKGW62-	1000	MICCI
OV CARACK*	I LAND	(DIOO)

		1
Lab Name: SCAL	Contract:	
Lab Code: LA024 Case No.:	SAS No.:	SDG No.: 203111311
Matric (soil / water) Water	Lab Sample ID: 20311131112	
Level: (low / med)	Date Received: 11/13/03	
% Solids:		

ug/L Concentration Units (ug/L or mg/kg dry weight):

CAS No.	Analyte	Concentration	C T	Q	M
7440-36-0	Antimony	3.7	U		Р
7440-38-2	Arsenic	2.9	Ú.		P
7440-39-3	Barkum	126	3		Р
7440-41-7	Beryllium	0.1	U		P
7440-43-9	Cadmium	0.2	U		Р
7440-47-3	Chromium	0.8	Į.		P
7440-50-8	Copper	2.7	3		P
7439-89-6	iron	14.1	J		Р
7439-92-1	Lead	1,5	J		P
7439-97-6	Mercury	0 1	J		AV
7440-02-0	Nickel	C.9	3		P
7782-49-2	Selenium	4.4	J	N	Р
7440-22-4	Silver	G.4	J		P
7440-28-0	Thatium	2.6	j	N	Р
7440-66-6	Zinc	0.9	3		ρ

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Color Before:	COLORLESS	Clarity Before	CLEAR	Texture:	
Color After:	COLORLESS	Clarity After	CLEAR	Artifacts:	
Comments:					

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INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO.

		SKGW6	41008 (DISS)	
Contract:		·		
SAS No.:	·	SDG No.:	203111311	
Lab Sample ID:	20311131113			
Date Received:	11/13/03			

% Solids:

Lab Name: GCAL

Lab Code: LA024

Matrix: (soil / water)

Level: (low / med)

Concentration Units (ug/L or mg/kg dry weight):

Case No.:

ug/L

CAS No.	Analyte	Concentration	С	Q	M
7440-36-0	Antimony	3.7	U		Р
7440-38-2	Arsenic	2.9	U		P
7440-39-3	Barium	44.6	В		Р
7440-41-7	Beryllium	0.1	U		Р
7440-43-9	Cadmium	0.2	U		Р
7440-47-3	Chromium	0.8	U		P
7440-50-8	Copper	3.4	В		Р
7439-89-6	Iron	14.1	U		P
7439-92-1	Lead	1.5	U		P
7439-97-6	Mercury	0.1	U		AV
7440-02-0	Nickel	5.2	В		Р
7782-49-2	Selenium	4.4	Ü	N	Р
7440-22-4	Silver	0.4	U		P
7440-28-0	Thallium	2.6	U	N	Р
7440-66-6	Zinc	2.6	В		Р

Color Before:	COLORLESS	Clarity Before:	CLEAR	Texture:	
Color After:	COLORLESS	Clarity After:	CLEAR	Artifacts:	
Commente:					

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NIRGANIC ANALISIS DATA SHEET

SKGW581908

Contract: SAS No.:		SDG No.:	203111311
_ SAS No.: _		SDG No.:	203111311
Lab Sample ID:	20311131114		
Date Received:	11/14/03		
	•	Lab Sample ID: 20311131114 Date Received: 11/14/03	

Concentration Units (ug/L or mg/kg dry weight)

ug/L

CAS No.	Analyte	Concentration	С	Q	М	7
7440-36-0	Antimony	3.7	Ü		Р	1
7440-38-2	Arsenic	32.9			Р	7
7440-39-3	Barium	822			Ρ	7
7440-41-7	Beryllium	2.9	В		Р	7
7440-43-9	Cadmium	1.8	В		Р	
7440-47-3	Chromium	112			Р	1
7440-50-8	Copper	139			Р	1
7439-89-6	Iron	129000			Р	7
7439-92-1	Lead	92 7			Р	7
7439-97-6	Mercury	C.1	Ü		AV	7
7440-02-0	Nickel	124			Р	7
7782-49-2	Selenium	4.4	Ü	N	Р	ય
7440-22-4	Silver	1.6	В		Р	
7440-28-0	Theilium	2.6	U		Р	7 ,
7440-66-6	Zinc	367			Р	7.3
57-12-5	Cyanide	3.0	U		AS	_

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Calor Before:	DR.BROWN	Clarity Before	CLEAR	Texture:	
Color After:	DR.BROWN	Clarky After,	CLEAR	Artifacts:	
Comments:					

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EPA SAMPLE NO.

INORGANIC ANALYSIS DATA SHEET

SKGW58FD1008

				J. Crit	001 0 1000
Lab Name:	GCAL	Contra	ct:		
Lab Code: L	A024 Case No.:	SAS N	o.:	SDG No.	: <u>203111311</u>
Matrix: (soil / v	vater) Water	Lah Sam	ple ID: 203111	31115	
Level: (low/m					
		Date Red	zeived: 11/14/0)3	
% Solids:					
Concentration	Units (ug/L or mg/kg dry weigh	t): ug/L	•		
CAS No.	Analyte	Concentration	С	Q	М
7440-36-0	Antimony	3.7	U		Р
7440-38-2	Arsenic	23.2			Р
7440-39-3	Barium	1000			Р
7440-41-7	Beryllium	1.0	В		Р
7440-43-9	Cadmium	0.2	U		Р
7440-47-3	Chromium	60.2			Р
7440-50-8	Copper	57.9			Ρ .
7439-89-6	Iron	74600			Р
7439-92-1	Lead	39.1			Р
7439-97-6	Mercury	0.1	U		ĀV
7440-02-0	Nickel	76.9			Р
7782-49-2	Selenium	4.4	U	N	P UJ
7440-22-4	Silver	. 0.5	В		Р
7440-28-0	Thallium	2.6	U		Р
7440-66-6	Zinc	172			PJ
57-12-5	Cyanide	3.0	U		AS
					ili 5/04 msu
					prsu-
	•				
Color Before:	DR.BROWN	Clarity Before: CL	EAR	Texture:	
Color After:	DR.BROWN	Clarity After: CL	EAR	- Artifacts:	
		•	······································	•	

Comments:

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SKGWF8:008	
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						SKGNF	8.008	į
Lab Name:	GCAL			Contract				
Lab Code:	LA024	Case No.:		SAS No.		SDG No.:	203111311	
Matric (soi	l/water)	Water		Lab Sample ID:	20311131116			
Level: (low	/ med)			Date Received:	11/14/03			
% Solids:	 							
Concentrat	رة مخدا ا هما	and or mades decreasing	⊷v uc/l					

CAS No.	Arahte	Concentration	0	Q	М	7
7440-36-0	Antimony	3.7	7		P	٦
7440-38-2	Arsenic	2.9	J		Р	٦
7440-39-3	Barium	8.7	3		P	7
7440-41-7	Bery tium	0.1	Ü		Р	٦
7440-43-9	Cadmium	0.2	ز		Р	٦
7440-47-3	Chromium	0.8	IJ		Р	٦
7440-50-8	Copper	1.6	В		P	7
7439-89-6	Iron	30.8	В		P	7
7439-92-1	Leed	1.5	J		Р	٦
7439-97-6	Mercury	0.1	J		ĀV	٦
7440-02-0	Nickel	0.7	J		Р	٦
7782- 49 -2	Selenium	4.4	Ü	N	ρ	٦
7440-22-4	Silver	0.4	J		P	٦
7440-28-0	Theffum	2.6	9		Р	٦
7440-66-6	Zinc	0.6	J		P	٦,
57-12-5	Cyanide	3.C	Ji .		AS	7

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Color Before:	COLORLESS	Clarity Before	CLEAR	Texture:	
Color After:	COLORLESS	Clarity After	CLEAR	Artifacts:	

Comments:

U.S. EPA - CLP

EPA SAMPLE NO.

INORGANIC	ANALYSIS	DATA	SHEET
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SKGW581008	(DISS)
21/244201000	(0:33)

Lab Name:	GCAL		Contract:				
Lab Code:	LA024	Case No.:	SAS No.:		SDG No.:	203111311	····
Matrix: (soil	/ water)	Water	Lab Sample ID:	20311131118			_
Level: (low/	med)		Date Received:	11/14/03			
% Solids:							
				•			

Concentration Units (ug/L or mg/kg dry weight):

CAS No.	Analyte	Concentration	С	Q	M	٦
7440-36-0	Antimony	3.7	U		P	┪
7440-38-2	Arsenic	6.0	В		Р	٦
7440-39-3	Barium	228			P	٦
7440-41-7	Beryllium	0.1	U		P	ヿ゙
7440-43-9	Cadmium	0.2	U		P	٦
7440-47-3	Chromium	0.8	U		Р	٦
7440-50-8	Copper	1.2	U		Ρ	ヿ
7439-89-6	Iron	2890			P	٦
7439-92-1	Lead	1.5	U		P	٦
7439-97-6	Mercury	0.1	U		AV	٦
7440-02-0	Nickel	1.3	В	•	Р	٦
7782-49-2	Selenium	4.4	U	N	Р	٦
7440-22-4	Silver	0.4	Ú		P	٦
7440-28-0	Thallium	2.6	U	N	Р	٦
7440-66-6	Zinc	0.6	U		Р	┪

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Color Before:	COLORLESS	Clarity Before:	CLEAR	Texture:	
Color After:	COLORLESS	Clarity After:	CLEAR	Artifacts:	
Comments:					

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EPA SAMPLE NO

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10.00-110		• •		

					SKGW5	8F01008 (DISS)	İ
Lab Name:	GCAL		Centract:				
Lab Code:	LAC24	Case No.	SASTIO	<u></u>	SDG No.:	203111311	
Matric (soil	/ water)	Water	Lab Sample	ID: 20311131119			
Level: (low	/med)		Date Receiv	red: 11/14/03			
% Solids:							

Concentration Units (ug/L or mg/kg dry weight):

ug/L

CAS No.	∸ralyte	Concentration	С	Q	M
7440-36-0	Antimony	5.2	В		Р
7440-38-2	Arsenic	8.0	3		Р
7440-39-3	Barium	278			Р
7440-41-7	Beryllium	0.1	Ú		Р
7440-43-9	Cadmium	0.2	Ü		Ρ
7440-47-3	Chromium	0.8	J		Р
7440-50-8	Copper	2.0	3		P
7439-89-6	Iran	704			P
7439-92-1	Leed	1.5	J		Р
7439-97-6	Mercury	0.1	U		AV
7440-02-0	Nickel	3.6	В		Ρ
782-49-2	Selenium	4,4	ن ت	N	Ρ
7440-22-4	Silver	0.4	į.		Р
7440-28-0	Thallum	2.5	U	N	Р
7440-66-6	Zinc	0.6	i.		ρ

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Color Before:	COLORLESS	Clarity Before	CLEAR	Texture:	
Color After:	COLORLESS	Clarity After	CLEAR	Artifacts:	

Comments:

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INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO.

SKGWFB1008 (DISS)	

Lab Name: GCAL	Contract:			· · · · · · · · · · · · · · · · · · ·	
Lab Code: LA024 Case No.:	SAS No.:		SDG No.:	203111311	
Matrix: (soil / water) Water	Lab Sample ID:	20311131120		····	
Level: (low / med)	Date Received:	11/14/03			
% Solids:					

Concentration Units (ug/L or mg/kg dry weight):

CAS No.	Analyte	Concentration	С	Q	M
7440-36-0	Antimony	3.7	U		Р
7440-38-2	Arsenic	2.9	U		Р
440-39-3	Barium	0.3	В		P
7440-41-7	Beryllium	0.1	U		P
7440-43-9	Cadmium	0.2	Ü		Р
7440-47-3	Chromium	0.8	U		Р
7440-50-8	Copper	1.5	В		P
7439-89-6	Iron	14.1	U		P
7439-92-1	Lead	1.5	U		P
439-97-6	Mercury	0,1	U	•	AV
7440-02-0	Nickel	0.7	В		Р
7782-49-2	Selenium	4.4	Ü	N	Р
7440-22-4	Silver	0.4	Ü		Р
7440-28-0	Thallium	2.6	U	N	Р
7440-66-6	Zinc	0.6	U U		P

Color Before:	COLORLESS .	Clarity Before:	CLEAR	Texture:	
Color After:	COLORLESS	Clarity After:	CLEAR	Artifacts:	
Comments:					

FORM I - IN

NORGANIO ANALI I CIDATA SHEET

, for the LP

SH	(GW2	61008		

	38344201000
Contract:	
54 S No.:	SDG No.: 203111311
Lab Sample ID: 20311131121	
Date Received: 11/15/03	_
	-
	54S No.: Lab Sample ID: 20311131121

Concentration Units (ug/L or mg/kg dry weight): Ug/L

CAS No.	Analyte	Concentration	С	Q	M
7440-36-0	Antimony	3.7	J		Р
7440-38-2	Arsenic	2.9	3		Р
7440-39-3	Barium	352			P
7440-41-7	Beryffum	3.2	3		P
7440-43-9	Cadmium	0.5	5		Р
7440-47-3	Chromium	20.6			P
7440-50-8	Copper	20.1	3		Р
7 439-89 -6	iron	10300			P
7439-92-1	Leed	8.5			Р
7439-97-6	Mercury	C.1	Ü		AV
7440-02-0	Nickel	16.8	В		P
7782-49-2	Selenium	4.4	IJ	N	P
7440-22-4	Silver	0.4	Ü		Р
7440-28-0	Thallium	2.6	J	<u> </u>	P
7440-66-6	Zinc	32.2			P
57-12-5	Cynnide	30	U		AS

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Color Before:	COLORLESS	Clarity Before	CLEAR	Texture:	
Color After:	COLORLESS	Clarity After:	CLEAR	Artifacts:	

Comments:

EPA SAMPLE NO.

SKGW301008

				37.34	301006
Lab Name: _G	CAL	С	ontract:		
Lab Code: LA	024 Case No.:	S	AS No.:	SDG No.	: 203111311
Matrix: (soil / wa	ater) Water	Lab	Sample ID: _2031113	31122	
Level: (low / me	ed)		e Received: 11/15/0		
% Solids:		Dati	a Received. 11/15/0	J	
Concentration	Units (ug/L or mg/kg dry weigh	t): ug/L		·	
CAS No.	Analyte	Concentration	С	Q	М
7440-36-0	Antimony	3.7	U		Р
7440-38-2	Arsenic	2.9	U		Р
7440-39-3	Barium	318			Р
7440-41-7	Beryllium	0.1	U		Р
7440-43-9	Cadmium	0.2	В		Р
7440-47-3	Chromlum	6.0	В		Р
7440-50-8	Copper	8.4	В		P
7439-89-6	Iron	2090			Р
7439-92-1	Lead	1.5	U		Р
7439-97-6	Mercury	0.1	U		AV
7440-02-0	Nickel	4.5	В		P
7782-49-2	Selenium	4.4	U	N	PUS
7440-22-4	Silver	0.4	l ū		P
7440-28-0	Thallium	2.6	1 0		P
7440-66-6	Zinc	6.5	В		PS
57-12-5	Cyanide	3.0	- U		AS
	1-,		<u> </u>	1	
					110/04
			• .	••	11. 6.
				•	
Color Before:	COLORLESS	Clarite Balar-	CLEAD	T-14	
		Clarity Before:	CLEAR	Texture:	
Color After:	COLORLESS	Clarity After:	CLEAR	Artifacts:	
Comments:					

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EPA SAMPLE NO.

NORSHNO AND IS SATE SHEET

SKGW611008	

			13 - 34,4 5 - 4 4	5 2 - 7		SKGW6	:1008	į
Lab Name:	GCAL			Contract:				i
Lab Code:	LA024	Case No.:		\$4 \$ 1.0		SDG No.:	203111311	
Matricc (soil	/ water)	Water		es Sample ID	20311131123			
Level: (low	/ med)			Cate Received:	11/15/03			
% Solids:								
Canada	ina I laite /ı	nation we have an item	hn: M					

CAS No.	i-nalyte	Concentration	2	Q	М	٦
7440-36-0	Antimony	3.7	J		Р	7
7440-38-2	Arsenic	3.7	В		P	٦
7440-39-3	Barium	91.3	В		Р	٦
7440-41-7	Berythium	0	J		P	٦
7440-43-9	Cadmium	02	ິນ		Р	٦
7440-47-3	Chromium	2.1	В		P	٦
7440-50-8	Copper	42	В		Р	٦
7439-89-6	kran	8640			Р	٦
7439-92-1	Leed	1.6	В		Р	٦
7439-97-6	Mercury	01	υ		AV	٦
7440-02-0	Nickel	7.6	В		Р	٦
7782-49-2	Selenium	4.4	บ	N	ρ	٦
7440-22-4	Silver	0.4	U		Р	٦
7440-28-0	Thallium	2.6	Ü		Р	٦
7440-66-6	Zinc	13 8	В		Ρ	٦
57-12-5	Cytenide	3.0	U		AS	٦

Color Before:	LT.YELLOW	Clarity Before	CLEAR	Texture:	
Color After:	COLORLESS	Clarity After	CLEAR	Artifacts:	
O					

Comments:

EPA SAMPLE NO.

INORGANIC	ANALYSIS	DATA	SHEET

SKGW611008 DUP

Lab Name: G	CAL	C	Contract:			
Lab Code: LA	.024 Case No.:	s	AS No.:	SDG N	lo.: 2031	11311
Matrix: (soil / wa	ater) Water	Lab	Sample ID: 203111	31126		
Level: (low / me	od)		e Received: 11/15/0			
% Solids:		Dat	e Neceived. 17730			
Concentration (Units (ug/L or mg/kg dry weight)	: ug/L				
CAS No.	Analyte	Concentration	C	Q	M	1
7440-36-0	Antimony	3.7	U		Р	
7440-38-2	Arsenic	7.2	В		Р]
7440-39-3	Barium	97.4	В		Р	}
7440-41-7	Beryllium	0.1	U		Р]
7440-43-9	Cadmium	0.2	U		Р]
7440-47-3	Chromium	2.3	В		Р]
7440-50-8	Copper	4.6	В		Р	1
7439-89-6	Iron	9270			Р]
7439-92-1	Lead	1.8	8		Р	
7439-97-6	Mercury	0.1	U		AV	
7440-02-0	Nickel	7.6	В		Р	_ بر
7782-49-2	Selenium	4.4	U	N N	Р	45
7440-22-4	Silver	0.4	U		Р	
7440-28-0	Thallium	2.6	U		Р	
7440-66-6	Zinc	11.9	В		Р	1
57-12-5	Cyanide	3.0	U		AS	
					i	115/01
Color Before: Color After:	LT.YELLOW LT.YELLOW	Clarity Before: Clarity After:	CLEAR CLEAR	Texture Artifact		
Comments:						

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NORGANIO ANALYSIO DATA SHEET

CVC	. 1631 000	

Lab Name:				Contract:	<u></u>	000 No.	202144244	
Lab Code:	LA024	Case No.:		_ SAS No.:		SDG No.:	203111311	
Matric (soil /	water)	Water		Lab Sample ID	203:1131127			_
Level: (low/	med)	<u> </u>		Date Received	11/15/03			
% Solids: _		_						
Concentratio	on Units (uç	g/L or mg.fkg dry weight)	ug-t.					

CAS No.	Anayte	Concentration	2	Q	M	7
7440-36-0	Antimony	3.7	J		Р	1
7440-38-2	Arsenic	9.3	3		Р	1
7440-39-3	Barium	147	3		ρ	1
7440-41-7	Beryllium	0.6	3		Р	1
7440-43-9	Cadmium	0.2	ز		Р	1
7440-47-3	Chromium	13.7			Р	1
7440-50-8	Copper	:7.4	В		Р	1
7439-89-6	fron	25800			Ρ	1
7439-92-1	Leed	23.4			Р	1
7439-97-6	Mercury	0.1	ز		AV	1
7440-02-0	Nickel	31.0	В		Р	1
7782-49-2	Selenium	4.4	J	N	Р	1 u:
7440-22-4	Silver	0.4	J		P	1
7440-28-0	Thatium	2.6	J		P	1
7440-66-6	Zinc	66.3			Р	11
57-12-5	Cyanide	3.0	J		AS	1

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Color Before:	DR.BROWN	Clarity Before	CLEAR	Texture:	
Color After:	LT.BROWN	Clarity After	CLEAR	Artifacts:	
Commenter					

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INORGANIC ANALYSIS DATA SHEET

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	THE STATE STATE	SKGW241008
Lab Name: GCAL	Contract:	
Lab Code: LA024 Case No.:	SAS No.:	SDG No.: 203111311
Matrix: (soil / water) Water		SDG No.: 203111311
Level: (low/med)	Lab Sample ID: 20311131128	
% Solids:	Date Received: 11/15/03	
Concentration Units (conf.		

Concentration Units (ug/L or mg/kg dry weight) : ug/L

Antimony

Arsenic

Barium

Beryllium

Cadmium

Chromium

Copper

Iron

Lead

Nickel

Silver

Zinc

Thallium

Cyanide

Mercury

Selenium

CAS No.

7440-36-0

7440-38-2

7440-39-3

7440-41-7

7440-43-9

7440-47-3

7440-50-8

7439-89-6

7439-92-1

7439-97-6

7440-02-0

7782-49-2

7440-22-4

7440-28-0

7440-66-6

57-12-5

Analyte	Concentration			
	~	C	Q	M
	3.7	Ü		P
	8.4	В	·	
	162	H		P
	0.7	B		I P
	0.2			Р
	19.5			P
				P
	21.6	В		P
	30500			+-;
	20.8			+

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В

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P P AS

P

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P

P

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Color Before: Color After: Comments:	LT.GRAY LT.GRAY	Clarity Before: Clarity After:	CLEAR	Texture: Artifacts:	
Comments:					

0.1

28.2

4.4

0.4

2.6

63.1

3.0

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EPA SAMPLE NO.

NORGANIO ANAL SIR DATA SHEET

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				,	SKGWZ	(2,008, '3,122)	İ
Lab Name:	GCAL		2 mtract.	<u>:</u>			
Lab Code:	LA024	Case No.:	\$4.5 No.:		SDG No.:	203111311	
Matric (soil	/weter)	Water	Lab Sample ID:	20311131130			
Level: (low /	/med)		Date Received:	11/15/03			
% Solide:							
0	1 I-B- A	land on one does not been	und.				

CAS No.	Analyte	Concentration	3	Q	М
7440-36-0	Antimony	4.1	В		P
7440-38-2	Arsenic	5.9	В		P
7440-39-3	Barium	344			Р
7440-41-7	Beryffum	0.1	U		P
7440-43-9	Cadmium	0.2	U		P
7440-47-3	Chromium	0.8	J		P
440-50-8	Copper	2.0	В	· · · · · · · · · · · · · · · · · · ·	Р
7439-89-6	iron	442			P
7439-92-1	Lead	1.5	IJ		Р
439-97-6	Mercury	0:	U		AV
7440-02-0	Nickel	1 7	В		Р
7782-49-2	Selenium	44	Ü	N	P
7440-22-4	Silver	04	U		P
7440-28-0	Thelium	26	U	N	P
7440-66-6	Zinc	0.6	U		P

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Color Before:	COLORLESS	Clanity Before	CLEAR	Texture:	
Color After:	COLORLESS	Clarity After	CLEAR	Artifacts:	
Comments:					

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EPA SAMPLE NO.

	INORGANIC	ANALYSIS	DATA	SHEET
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SKGW301008 (DISS)

Lab Name: G	SCAL	Contra	et:	L		
نسية	NO24 Case No.:	SAS N		SDG N	o.: <u>203111311</u>	
Matrix: (soil / wa	ater) Water	Lab Sam	ple ID: 203111	31131		_
Level: (low / me	ed)	Date Rec	ceived: 11/15/0)3		
% Solids:				·		
Concentration (Units (ug/L or mg/kg dry weigl	nt): ug/L				
CAS No.	Analyte	Concentration	С	Q	M	
7440-36-0	Antimony	3.7	U		P	

CAS No.	Analyte	Concentration	С	Q	М
7440-36-0	Antimony	3.7	Ü		Р
7440-38-2	Arsenic	2.9	U		Р
7440-39-3	Barium	334			Р
7440-41-7	Beryllium	0.1	U		Р
7440-43-9	Cadmium	0.2	U		Р
7440-47-3	Chromium	0.8	U		Р
7440-50-8	Copper	5.4	В		P
7439-89-6	iron	427			Р
7439-92-1	Lead	1.5	Ü		Р
7439-97-6	Mercury	0.1	U		AV
7440-02-0	Nickel	0.7	U		Р
7782-49-2	Selenium	4.4	U	N	P
7440-22-4	Silver	0.4	U		Р
7440-28-0	Thallium	2.6	U	N	Ρ
7440-66-6	Zinc	0.6	U		Р

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Color Before:	COLORLESS	Clarity Before:	CLEAR	Texture:	
Color After:	COLORLESS	Clarity After:	CLEAR	Artifacts:	
Comments:					

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EPA SAMPLE NO.

NORGANIO ANALISIS DATA SHEET

SKGV	VE* 1	നവദ	(DISS)

			:		i
Lab Name: GCAL		Contract:	_		
Lab Code: LA024	Case No.:	S4S No.:	SDG No.:	203111311	
Matric (soil / water)	Water	Lab Sample ID 20311131132			
Level: (low/med)		Date Received: 11/15/03	_		
% Solids:			_		

Concentration Units (ug/L or mg/kg dry weight): ug/L

CAS No.	Analyte	Concentration	C	Q	М
7440-36-0	Antimony	3.7	<i>-</i>		Р
7440-38-2	Arsenic	7.5	3		Р
7440-39-3	Barium	83.3	3		P
7440-41-7	Seryffium	0.1	J		Р
7440-43-9	Cadmium	0.2	U		P
7440-47-3	Chromium	0.8	ij.		Р
7440-50-8	Copper	1.2	Ü		Р
7439-89-6	Iron	5100			P
7439-92-1	Leed	1.5	Ü		Р
7439-97-5	Mercury	0.1	J		AV
7440-02-0	Nickel	4.0	3		P
7782-49-2	Selenium	4.4	Ü	N	Р
7440-22-4	Silver	0.4	U		P
7440-28-0	Thallium	2.€	J	Ň	Р
7440-66-6	Zinc	4.8	3		Р

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Calor Before:	COLORLESS	Clarity Before:	CLEAR	Texture:	
Color After:	COLORLESS	Clarity After	CLEAR	Artifacts:	

Comments:

EPA SAMPLE NO.

INORGANIC ANALYSIS DATA SHEET

SKGW611008 DUP (DISS)

Lab Name: GCAL	Contract:		
Lab Code: LA024 Case No.:	SAS No.:	SDG No.:	203111311
Matrix: (soil / water) Water	Lab Sample ID: 20311131134		
Level: (low / med)	Date Received: 11/15/03		
% Solids:			
Concentration Units (ug/L or mg/kg dry weight): ug/L	·		

CAS No.	Analyte	Concentration	С	Q	М	7
7440-36-0	Antimony	3.7	U	·	Р	1
7440-38-2	Arsenic	4.1	В		Р	1
7440-39-3	Barium	82.5	В		Р	7
7440-41-7	Beryilium	0.1	U		Р	7
7440-43-9	Cadmium	0.2	U		Р	٦
7440-47-3	Chromium	0.8	U		Р	7
7440-50-8	Copper	1.2	U		Р	1
7439-89-6	Iron	5000			Р	1
7439-92-1	Lead	1.5	U		Р	٦
7439-97-6	Mercury	0.1	U		AV	٦
7440-02-0	Nickel	3.9	В		Р	1
7782-49-2	Selenium	4.4	U	N	P	٦.
7440-22-4	Silver	0.4	U		Р	1
7440-28-0	Thallium	2.6	U	N	Р	٦u
7440-66-6	Zinc	1.5	В		Р	٦,

Color Before:	COLORLESS	Clarity Before:	CLEAR	Texture:	<u></u>
Color After:	COLORLESS	Clarity After:	CLEAR	Artifacts:	
Comments:					•

EPA SAMPLE NO.

	••	TRIGANIC 4NAL -5 S TATE	5- EE	SKG W 6	31 00 8 (DISS)	
Lab Name: GCAL		Contract	i			
Lab Code: LA024	Case No.:	S4S 10.:	_ , _ <u></u>	SDG No.:	203111311	
Matrix (soil / water) W	aler	Lab Sample 10.	20311131135			
Level: (low / med)		Dare Received:	11.15/03			
% Solids:						

Concentration Units (ug/L or mg/kg dry weight) . Ug/L

CAS No.	Analyte	Concentration	c	Q	М
7440-36-0	Antimony	3.7	J J		P
7440-38-2	Arsenic	5.4	3		P
7440-39-3	Banum	58 €	3		ρ
7440-41-7	Beryllium	÷ .	J		P
7440-43-9	Cadmum	32			P
7440-47-3	Chromium	3.8	U		Р
7440-50-8	Copper	12			ρ
7439-89-6	Iran	1150			Р
7439-92-1	Leed	1.5	U		Р
7439-97-6	Mercury	0.1	: 1		AV
7440-02-0	Nickel	5.9	3		Р
7782-49-2	Selenium	4.4	Ú	N	Р
7440-22-4	Silver	0.4	Ü		Р
7440-26-0	Thellium	2.6	บ	N	Р
7440-66-6	Zinc	3.7	B		Р

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Color Before:	COLORLESS	Clarity Before	CLEAR	Texture:	
Color After:	COLORLESS	Clarity After	CLEAR	Artifacts:	

Comments:

INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO.

5	KGW241	008 (DISS)	

Lab Name:	GCAL		Contract:				
Lab Code:	LA024	Case No.:	SAS No.:		SDG No.:	203111311	
Matrix: (soil /	water) <u>V</u>	Vater	Lab Sample ID:	20311131136			
Level: (low / r			Date Received:	11/15/03			
% Solids:							

Concentration Units (ug/L or mg/kg dry weight):

CAS No.	Analyte	Concentration	С	Q	М
7440-36-0	Antimony	3.7	U		Р
7440-38-2	Arsenic	3.6	В		Р
7440-39-3	Barium	90.4	В		Р
7440-41-7	Beryllium	0.1	U		Р
7440-43-9	Cadmium	0.2	Ü		Р
7440-47-3	Chromium	0.8	U		Р
7440-50-8	Copper	2.1	В	· · · · · · · · · · · · · · · · · · ·	Р
7439-89-6	iron	1000			Р
7439-92-1	Lead	1.5	U		P
7439-97-6	Mercury	0.1	U		AV
7440-02-0	Nickel	0.7	U		P
7782-49-2	Selenium	4.4	U	N	Р
7440-22-4	Silver	0.4	U		Р
7440-28-0	Thallium	2.6	U	N	Р
7440-66-6	Zinc	1.9	В		Р

Color Before:	COLORLESS	Clarity Before:	CLEAR	Texture:	
Color After:	COLORLESS	Clarity After:	CLEAR	Artifacts:	······································
Comments:					

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CHAIN OF CUSTODY RECORD

Lab use only first Tick

By submitting these samples, you agree to the terms and conditions contained in our most recent schedule of services.

4342 203111311

7979 GSRI Avenue, Baton Rouge, Louisiana 70820-7402 Phone 225 769.4900 • Fax 225.767.5717	Client Name	Client #	Workorder # Din 1
Report to: Client: Carth Tech Address: 200 Line Strat Address: 14155175 Contact: 141 155175 Phone: 559 142 2700 Fax: 5359 142 2516 P.O. Number Project Name/Number Stringer 16 Sampled By:	Bill to: Client: Address: Contact: Phone: Fax: F	Analytical Requests & Method	Lab use only: Custody Seal used from fine in tact from fine Temperature **C
Matrix' Date 1 ime 1 Sample Description X Sk G W 07 Preservatives Containers Various 7 X		Romarks: (Dillion of Street of Act of Street of Man har har many tes.	
Turn Around Time: 24-48 hrs. 3 Relinquished by: (Signature) Received by:			
Refinquished by: (Signature) Received by: Reflinquished by: (Signature) Received by: Received by:	(Signeture) Date: Time: 1/13-07 0950	Fed EX Ai-1111 8125 953	30 8230

7979 GSRI Avenue, Baton Rouge, Louisiana 70820-7402

CHAIN OF Cy-ODY RECORD

Lab use only fait

4342

203/1/3/1 11-27-03

Phone 225.769.4900 • Fax 225.767.5717 Client Name Client # Workorder #				[ue Date														
Report to:	Bill to:	<u>. </u>				Ana	vtica	al Ro	que	ets &	Meth	od		Lab u	se only	:			
Client: Farth Tech	Client:			}	i	}	١	}		}	1	1	}-	1	stody S				
Address: 200 Vine Street	Address:						ļ				Ì		1			yes .	no no		1
Wilder Ky 41076	- Jun	الا		1										1		Dyes	∏ no		
Contact: Dat Higgins	Contact:			1					2					Ter	nperatu	re °C	4_		
Phone: 359 442 2300	Phone:			19				W	V.				•						
Fax: 159 142 231	Fax:			16				19	1										
P.O. Number Project Name/Number SH280.81 Skinne.	Stringer Landfill 4th 2003			,	15		18	1/2	ta	2									
Sampled By: Derek Capas + Pat Ang	Agins			ill	12.5	Ri	Her	à	ssol	111/10								Lab ID	
Matrix ¹ Date Time C G G Sample Description		Preservatives	No Con- tainers	14		B	08	The state of the s	di	Cill				Remar	ks:		1065	11/1	3
W 117/211105 X SKGW-	-59 1008	وده: مه	19	X	X	X	X	X	X	X						,	10	-0	3.
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Turn Around Time: ☐ 24-48 hrs. ☐ 3 days ☐ 1 week Standard ☐ Other																			
Relinquished by: (Signature) Received by: (Signature) Date: Time: No. 1										11									
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W.E. 8495 75308230 Calla	July X/i	13-03 0	930						d d	っん	, _		' 1 (~ 7	0 9	27.7	\circ			
Received by: (Signature) Received by:	(Signature) Dal	te: Ti	me:						ıples,	you a	ıgree	to the	terms	and ervices	, 0,				

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CHAIN OF CUSTODY RECORD

out coat analytical Laboratomes, Inc. 7979 GSRI Avenue, Baton Rouge, Louisiana 70820-7402 Phone 225.769.4900 • Fax 225.767 5717	Lab use only Earth Teck Client Name	4342 Client #	20 3/1/3/1 1/27/3 Workorder # Due Date
W 11/19/12:40 X Su (, w-6	Preservatives No Containers 2 A 1008 VARIOR 7	Analytical Requests & Method Shall Remarks: Custody Seal used	
Relinquished by: (Signature) Received by:	(Signature) (Signature) (Signature) (Signature) (Signature) (Date: Time: 1/-13-03 693-6	Note: Fed EX A:	the terms and

7979 GSRI Avenue, Baton Rouge, Louisiana 70820-7402 Phone 225.769.4900 • Fax 225.767.5717

CHAIN OF CHOODY RECORD Lab use only

Client Name

Client #

		Re	por	t to:		·	Bill	to:				Anal	\	ı Da		ete R Ma			Lab use only:	
Conta Phor Fr P.O. No.	is:	arth Wilder 139 4 139 44	Te Re Higher	3/1 5/15 25/1	1076 5 00	Client: Address: Contact: Phone: Fax:	- Gume			1 Vola Files	4/65	Anal	tice Signature	Metals	ved Mcke	ets & Me	ethod		Custody Seal used Tyes no in tact Tyes no Temperature °C	
	Ì			IGI			Copas		No	12	619	18	65	de	1055	MACE			Remarks: (Diss) Refer to table 718 (TCL) and tables	Lab ID
Matrix	Date	(2400)	F	b	Sample Description			Preserva	tainers	(,)	7	X	\	1/1	Ĵ	7	- -		Remarks:	11/12
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Turn	Around	Time:] 24-	48 hrs. 🔲 3	days	1 week	X Sta	ındard		Othe	r								
	ished b): (Signa	ature)		Received by	: (Signature)		Date:	Time:	Not	e:		_				2/	3.	Can and	
Byling	iished b	🕩: (Signa	ature)			: (Signature)	11	Date:	Time: Note: Fed Ex 8425 9530 93				70 3510							
Reling		<u>425</u> y: (Signa				: (Signature)		////03 Date:	Time:	1										
						(By s	ubm dition	itting t is con	these taine	sam d in c	ples, our m	you agre ost recer	e to the t it schedu	erms a le of se	and ervices.	

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Belinquished by: (Signature).

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Received by: (Signature)

CHAIN OF CUSTODY RECORD

7979 (ISRI Avenue, Baton Rouge, Louisiana 70820-7402 Phone 225.769.4900 • Fax 225.767.5717

Lab use only

4342 Client # 203111311

Due 1 1

Client Name Workorder # Report to: Bill to: Lab use only: **Analytical Requests & Method Custody Seal** Client: used 🖾 yes 🗀 🖂 Address: Dyes []no Temperature °C Contact: Phone: Project Name/Number Jand 1511 4th Br P.O. Nymber Sampled By of light & felt thoughts Sample Description Matrix Preservatives Containers SKONTE 1008 3 5155N51M6D1188 5K5U52108 .3 3 3 3 Turn Around Time: 24-48 hrs. 3 days ☐ 1 week ☐ Standard ☐ Other (Signature) رزRelinquished by Received by: (Signature) Date: Fed Ex 9425 9530 8310

*San ples are in Separate work order

By submitting these samples, you agree to the terms and conditions contained in our most recent schedule stand Time: Note:

11-11-03

7979 GSRI Avenue, Baton Rouge, Louisiana 70820-7402 Phone 225.769.4900 • Fax 225.767.5717

CHAIN OF CLETODY RECORD

Lab use only

Client Name

Client #

Workorder #

Due Date

			Re	por	t to:	- 1		Bill to	:			Α	\nalv	tical I	Requ	ests 8	Moth	od		Lab use only:			•
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1	iress		90 1	1/1	2	mert	Address:													used [] yes 🔲 n	0	
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l co	ntaci	t: <i>I</i>	Pit-	14	451	45	Contact:	MIN			M				14					Temperature	°C	Q_{\perp}	
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iviati	` '	PARI	(2400)	m p	a b	Sample Description	1 — —…———		Preservatives	Con- tainers	1	1	1	1	77 1	7				Remarks:	(A)	$\prod IU$	113
W	1 7	E/14	12.40		X	SKGW 26	1008			7	ľΧ	\	くじ	(X		X	1			Hicker to	tabels	1-2	(.
h	, 4	Lehry	10:15		V	SKGW 3C				7	X	95	X)	(1)	ďχ	X				7/41)	mol3	-2	-
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Relinquished by: Signature) Bycovyed by: (Signature) Date: Time:																							
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Hel	ingui:	shedib	y: (Signa	ature)		Received by	(Signature)		ite: Ti	me:	By s	ubmitti	ing th	ese s	ample:	s, you	agree	to the te	rms a	nd			i
	1/1	He	سار			1000	rally	me II	1100	<u>800</u>	cond	itions	conta	ined i	n our i	nost r	ecent s	chedule	of se	rvices.			

GCAL H

CHAIN OF CUSTODY RECORD

GULF COAST AMALYTICAL LABORATORIES, INC 7979 GSRI Avenue, Baton Rouge, Louisiana 70820-7402 Phone 225.769.4900 • Fax 225.767 5717	Lab use only East Tick Client Name	4347 2 Client #	103/1/3/1
Report to: Client: Early Tech Address: 2CE Vine Street Wilder Ky 41076 Contact: Phone: 459 442 350 Fax: 459 442 231/ P.O. Number Project Name/Number/	Contact: Phone: Fex: Address: Addr	Analytical Requests & Method	Lab use only: Custody Seal used yes no in tact yes no Temperature *C
Sampled By: Control Skinner Kar Sample Description Skinner Kar Skinn	Preservatives No.	XX Junit	Romarka: (5) 1113 Meter to table 723 23 (tol) and table 30-34 Stal) at the Mail of the The tar last at 201/pt
Turn Around Time: 24-48 hrs. 3 Religioushed by: (Signature) Received by: Religioushed by: (Signature) Received by: Received by:	(Signature) Date: Time:	Other Note: Fall Et S42 By submitting these samples, you agree to the	5 9530

GULF COAST ANALTTICAL LABURATORIES. INC 7979 GSRI Avenue, Baton Rouge, Louisiana 70820-7402 Phone 225.769.4900 • Fax 225.767.5717 CHAIN OF CYTODY RECORD

Lab use only Earth Tech

4347-

203/1/3/1

1,-01-03

Phone 225.769.4900 • Tax 225.767.5717 Client Name Client #	Workorder #	Due Date		
Report to: Bill to: Analytical Requests & Method	Lab use only:			
Client: tarth tech Client:	Custody Seal			
Address: ZEO Vine Street Address:	used ☐ yes	□ no		
Wilder, Ky 41076 Some	in tact ☐ yes	□no		
Contact: Pat Hesgins Contact:	Temperature °C	<u> </u>		
Phone: 959 442 2360 Phone:				
Fax: 959 442 2311 Fax:				
P.O. Number of Project Name/Number Science Land MI 4th &t 2853				
Sampled By: Derek Copas & Pat Higgins		Lab ID		
Matrix ¹ Date Time (2400) Time (2400) Sample Description Preservatives Containers	Remarks:	(Qia) (1/13		
W My 11:35 X SKGW61MSD 1008 7X XXXXX	Hefer to table	73H - 25 H		
N 11/14 1220 X 5KGW631008 7X XXXXX	(+ch) and for	1426 -27		
	0/4/) 4	10.		
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	Final UF 11			
	plan for Fish			
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├ ──┼ ── ├ ─ ╎	177			
				
Turn Around Time: 24-48 hrs. 3 days 1 week Standard Other				
Relinquished by: (Signature) Received by: (Signature) Received by: (Signature) Date: Time: Note: Relinquished by: (Signature) Date: Time: FLA LX Application of the control of the c	6530 027	/		
Relinquished by: [Signature] 174ceived by: (Signature) Date: Time:	1110 372	r		
11-1500120				
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Lab use only

Refered by; (Signature)

CHAIN OF CUSTODY RECORD

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By submitting these samples, you agree to the terms and nditions contained in our most recent schedule of services.

203111311

7979 GSRI Avenue, Baton Rouge, Louisiana 70820-7402 Phone 225 769 4900 * Fax 225 767.5717 Client Name Workerder # Bill to: Lab use only: Report to: Analytical Requests & Method Custody Saul Client: used [7] yes Address: Willer 16 41076. in tact [7] yes 1 100 Temperature *C Phone: 937 442 2 700 Phone: Fax: 859 842 2311 Project Name/Number Science Lacil SII 4th Ob P.O. Number No Con-Date Cample Description Preservatives lamers 5KEWZY 1008 10 SK CWGIHSDICUS 54 61026 1008 of analytes 3KGW 30 1008 5K GW 63 1008 _X SKCWTB 1008 Standard Turn Around Time: 24-48 hrs. ☐ 1 week ☐ Other ☐ 3 days Relinquished by: (21gpature) Received by: (Signature) Note: 11-15-03 1040 Fed 58475 9530 8321

1B SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

Lab Name:	GCAL	Sample ID:	SKGW07R	1008	·····						
Lab Code:	LA024 Case No.:	Contract:									
Matrix: W	·			SDG No.							
Sample wt/	vol: 1000 Units: mL				File ID: 2031126/						
											
Level: (low/	med)	Date Collecte	ed: <u>11/12/0</u>	1 ime	: 1453						
% Moisture	: decanted: (Y/N)	Date Receive	ed: <u>11/13/0</u>)3	····						
GC Column	n: DB-5MS-30M ID: .25 (mm)	Date Analyzed: 11/26/03 Time: 1638									
Concentrate	ed Sample Volume: 1000 (µL)	Dilution Facto	Dilution Factor: 1 Analyst: RLW								
	Volume: (µL)	Prep Method:									
		•			····						
injection vo	olume: 2 (µL)	Апајупсан ме	inod: OLK	10 4.2							
GPC Cleanup: (Y/N) N pH: Instrument ID: MSSV2											
CONCENT	RATION UNITS: ug/L										
CAS NO.	COMPOUND	RESULT	Q	RL							
			 								
95-95-4	2,4,5-Trichlorophenol	10.0	U	10.0	_						
88-06-2	2,4,6-Trichlorophenol	10.0	U	10.0	4						
120-83-2	2,4-Dichlorophenol	10.0	U	10.0							
51-28-5	2,4-Dinitrophenol	25.0	U	25.0	_ ut						
121-14-2	2.4-Dinitrotoluene	10.0	U	10.0							
606-20-2	2,6-Dinitrotoluene	10.0	Ü	10.0							
91-58-7	2-Chloronaphthalene	10.0	U	10.0							
95-57-8	2-Chlorophenol	10.0	U	10.0							
91-57-6	2-Methylnaphthalene	10.0	U	10.0							
88-74 -4	2-Nitroaniline	25.0	U	25.0							
88-75-5	2-Nitrophenol	10.0	U•	10.0							
91-94-1	3,3'-Dichlorobenzidine	10.0	Ü	10.0							
99-09-2	3-Nitroaniline	25.0	υ	25.0							
534-52-1	2-Methyl-4,6-dinitrophenol	25.0	U	25.0							
59-50-7	4-Chloro-3-methylphenol	10.0	U	10.0							
106-47-8	4-Chloroaniline	10.0	U	10.0							
7005-72-3	4-Chlorophenyl-phenylether	10.0	U	10.0							
106-44-5	4-Methylphenol (p-Cresol)	10.0	U	10.0							
83-32-9	Acenaphthene	10.0	U	10.0							
208-96-8	Acenaphthylene	10.0	Ų	10.0							
120-12-7	Anthracene	10.0	U	10.0							
56-55-3	Benzo(a)anthracene	10.0	U	10.0	7						
50-32-8	Benzo(a)pyrene	10.0	U	10.0	7						
205-99-2	Benzo(b)fluoranthene	10.0	U	10.0	7						
191-24-2	Benzo(g,h,i)perylene	10.0	U	10.0	7						
207-08-9	Benzo(k)fluoranthene	10.0	U	10.0	7						
111-91-1	Bis(2-Chloroethoxy)methane	10.0	U	10.0	7						
111-44-4	Bis(2-Chloroethyl)ether	10.0	U	10.0	7						
108-60-1	bis(2-Chloroisopropyl)ether	10.0	U	10.0	7						
117 91.7	hic/2 athylhoxyl)ohthalate	10.0000		10.0	711						

113/04

REMINISCHT LEICHRAMM (IN AMALIES SILVATA SHEET

Lab Name	gaal	Samp 4 D	SKG ACTR	208	
	LA024 Case No.:	Contract			
Matrix: W				SDG No.:	203111311
Sample wt/	wolt 1000 Units: mt			—— 131101 Lab Fi	
	/med)	Date Collecte	d: 11 12/0)3 Time:	1453
	decarted: (Y/N)	Date Receive			
				3 Time:	1638
	12 DB-5MS-30M (D): 25 (mπ)				
	ed Sample Volume: 1000 (µL)			Analy	
Soil Aliquot	Volume: (μL)	Prep Method:			
Injection Vo	olume: 2 (uL)	Analytical Me	thod: OLA	AO 4.2	
GPC Clean	up: (Y/N) N pH:	Instrument ID	: MSSV2		
CONCENTI	RATION UNITS: ug·L				
CAS NO.	COMPOUND	RESULT	Q	RL	
101-55-3	4-Bromophenyl-pnenylether	10.0	U	10.0]
85-68-7	Butylbenzylphthalate	10.0	J	10.0]
86-74-8	Carbazole	10.0	บ	10.0	
218-01-9	Chrysene	10.0	U	10.0]
84-74-2	Oi-ri-butylphthalate	10,0 0.853	J	10.0] u I
117-84-0	Di-n-octylphthalate	10.0	U	10.0] นา
53-70-3	Diberz(a,h)anthrapere	10.8	U	10.0	
132-64-9	Dibenzofuran	10.0	ี่ป	10.0]
84-66-2	Diethylphthalate	10.0	Ü	10.0	
131-11-3	Dimethyl-phtha:ate	10.0	ິນ	10.0	
105-67-9	2.4-Dimethylpheno	10.0	Ü	10.0]
206-44-0	Fluoranthene	10.0	U	10.0	
86-73-7	Fluorene	10.0	U	10.0]
118-74-1	Hexachlorobenzere	10.0	υ	10.0	}
87-68-3	Hexachlorobutadiene	10.0	υ	10.0	j
77-47-4	Hexachlorocyclopentad:ene	10.0	U	10.0]
67-72-1	Hexachloroethane	*0.0	U	10.0	1
193-39-5	Indeno(1,2,3-cd)pyrene	10.0	U	10.0]
78-59-1	Isopharone	13.0	U	10.0	}
91-20-3	Naphthalene	10.0	Ü	10.0	
100-01-6	4-Nitrognitine	25.0	υ	25.0	
98-95-3	Nitrobenzene	*0.0	U	10.0	
100-02-7	4-Nitrophenoi	25.0	υ	25.0	
87-86-5	Pentachloropheno	25.0	U	25.0	
85-01-8	Phenanthrene	10.0	U	10.0	
108-95-2	Phenol	*0.5	U	10.0	
129-00-0	Pyrene	13.0	U	10.0	
621-64-7	N-Nitroso-di-n-procytamine	10.0	U	10.0	
86-30-6	N-Nitrosodiphenyramine	10.0	U	10.0	
95-48-7	o-Cresoi	10.C	U	10.0	

1/13/04

FORM : SV-1

1F

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET TENTATIVELY IDENTIFIED COMPOUNDS

Lab Name: GCAL	Sample ID: SKGW07R1008
Lab Code: LA024 2 Case No.:	Contract:
SAS No.: SDG No.: 203111311	Lab File ID: 2031126/S4178
Matrix: Water	Lab Sample ID: 20311131101
Sample wt/vol: Units:	Date Collected: 11/12/03 Time: 1453
Level: (low/med)	Date Received: 11/13/03
% Moisture: not dec.	Date Extracted:
GC Column: DB-5MS-30M ID: .25 (mm)	Date Analyzed: 11/26/03 Time: 1638
Concentrated Extract Volume: (µL)	Dilution Factor: 1 Analyst: RLW
Injection Volume: 1.0 (µL)	Prep Method:
GPC Cleanup: (Y/N) N pH:	Analytical Method: SW-846 8270C
	Instrument ID: MSSV2
Number TICs Found: 2	·
CONCENTRATION UNITS:	
CAS NO. COMPOUND	RT EST. CONC. Q
1 . 301-02-0 9-Octadecenamide, (Z)-	12.603 18
2 . 301-02-0 9-Octadecenamide, (Z)-	14.207 42.7

FORM I SV-TIC

* **

SEMNIQUATILE (1973) AS AS AS AS SIGNATA SHEET

Lati Name:	GCAL	Samble 1 (SKGW06R1008		
Lab Code:	LAC24 Case No.:	Contract:			
Matrix: Wa	•	SAS No :			203111311
	of: 1000 Units: mL): 263111 31102		ID: 2031126/S
Levei: (low/r	ned)	Date Collected	1: 11/12/03	Time: _	1525
% Moisture:	decanted: (Y/N)	Date Received	11/13/03		
GC Column	: DB-5MS-30M ID: _25 (mm)	Date Analyzed	: 11/26/03	Time:	1705
Concentrate	d Sample Volume: 1000(µL)	Oilution Factor	: 1	Analysi	t RLW
Soil Aliquot	Volume: (μL)	Prep Method:			
	lume: 2 (µL)	Analytical Meth	od: OLMO 4.2		
	ip: (Y/N) N pH;				
	COMPOUND	RESULT	Q	RL ·	
95-95-4	2,4,5-Trichloropheros	10 0	U	10.0	
88-06-2	2,4,6-Trichloropherol	10.C	U	10.0	
120-83-2	2,4-Dichloropheno	10.C	U	10.0	
51-28-5	2,4-Dinitrophenol	25.0	Ü	25.0	LU
121-14-2	2,4-Dinitrololuene	• • • • • • • • • • • • • • • • • • • •	U	10.0	
606-20-2	2,6-Dinitrotoluene	-0.0	כ	10.0	ı
91-58-7	2-Chloronaphthalene	10.0	U	10.0	
95-57-8	2-Chlorophenoi	10.0	U	10.0	
91-57-6	2-Methylnaphthalene	10.0	U	10.0	
88-74-4	2-Nitroaniine	25.0	U	25.0	
88-75-5	2-Nitrophenol	10.0	υ	10.0	
91-94-1	3,3'-Dichlorobenzidine	10.0	U	10.0	
99-09-2	3-Nitroaniine	25.0	U	25.0	
534-52-1	2-Methyl-4,6-dinitrophenol	25.0 10.0	U	25.0	
59-50-7 106-47-8	4-Chloro-3-methylphenoi 4-Chloroaniine	10.0	U	10.0	K
7005-72-3	4-Chiorophenyl-phenylether	10.0	U	10.0	13
106-44-5	4-Methylphenol (p-Cresol)	10.0	U	10.0	
	Acenaphthene	10.0	 	10.0	
208-96-8	Aconaphthylene	10.0	U	10.0	
	Anthracene	10.0	U	10.0	
	Benzo(a)anthracere	10.0		10.0	
	Benzo(a)pyrene	10.0	U	10.0	
	Benzo(b)fluoranthene	10.0	- u	10.0	
	Benzo(g.h.i)perylene	10.0	U	10.0	
	Benzo(k)fluoranthere	10.0	U	10.0	

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10.0

10.0

1: 12 0.656

U

U

U

10.0

10.0

10.0

10.0

111-91-1

111-44-4

108-60-1

117-81-7

Bis(2-Chloroethoxy methane

bis(2-Chloroisopropyliether

bis(2-ethylhexyl)phthalate

Bis(2-Chloroethyl)e:ner

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

Lab Name:	GCAL	Sample ID: SKGW06R1008							
	LA024 Case No.:	Contract:							
Matrix: W		SAS No.:	,	SDG No.:	203111311				
	vol: 1000 Units: mL			131102 Lab Fil					
Level: (low/	med)	Date Collecte	d: 11/12/0	D3 Time:	1525				
% Moisture:	decanted: (Y/N)	Date Receive	d: <u>11/13/</u> 0	03					
GC Column	: DB-5MS-30M ID: .25 (mm)	Date Analyzed	d: <u>11/26/</u> 0	Time:	1705				
Concentrate	ed Sample Volume: 1000 (µL)	Dilution Facto	r: <u>1</u>	Analy	st: RLW				
Soil Aliquot	Volume: (μĻ)	Prep Method:							
	lume: 2 (µL)	Analytical Met							
	up: (Y/N) N pH:	Instrument ID:							
0, 0 0		,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,							
CONCENTE	RATION UNITS: ug/L	-		t.					
	0.0110.01110	250111.5		5 .					
CAS NO.		RESULT	Q	RL	1				
101-55-3	4-Bromophenyl-phenylether	10.0	U	10.0	1				
85-68-7	Butylbenzylphthalate	10.0	U	10.0	1				
86-74-8	Carbazole	10.0	U U	10.0					
218-01-9	Chrysene	10.0	U	10.0	uī				
84-74-2	Di-n-butylphthalate	10. C.D.866	 	10.0	a .				
117-84-0	Di-n-octylphthalate	10.0	U	10.0	l us				
53-70-3 132-64-9	Dibenz(a,h)anthracene	10.0	 	10.0	-				
84-66-2	Dibenzofuran Diathylahthalata	10.0	 	10.0	1				
	Diethylphthalate Dimethyl-phthalate	10.0	 	10.0	ł				
131-11-3	2,4-Dimethylphenol	10.0	U	10.0	(
105-67-9	Fluoranthene	10.0	U	10.0	ł				
86-73-7	Fluorene	10.0	U	10.0					
118-74-1	Hexachlorobenzene	10.0	u	10.0					
87-68-3	Hexachlorobutadiene	10.0	Ü	10.0					
77-47-4	Hexachlorocyclopentadiene	10.0	Ū	10.0					
67-72-1	Hexachloroethane	10.0	Ū	10.0					
193-39-5	Indeno(1,2,3-cd)pyrene	10.0	Ü	10.0	i				
78-59-1	Isophorone	10.0	Ü	10.0					
91-20-3	Naphthalene	10.0	U	10.0					
100-01-6	4-Nitroaniline	25.0	J	25.0					
98-95-3	Nitrobenzene	10.0	C	10.0					
100-02-7	4-Nitrophenol	25.0	U	25.0					
87-86-5	Pentachlorophenol	25.0	U	25.0					
85-01-8	Phenanthrene	10.0	U	10.0					
108-95-2	Phenol	10.0	U	. 10.0					
129-00-0	Pyrene	10.0	U	10.0					
621-64-7	N-Nitroso-dl-n-propylamine	10.0	Ų	10.0					
86-30-6	N-Nitrosodiphenylamine	10.0	U	10.0					
05 48 7	o Croppl	10.0	11	10.0					

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Lab Name: GCAL	Sample ID Sr GW06R1008
Lab Code: LAC24 2 Case No.:	Contract:
SAS No.: SDG No.: _20311131	1 Lab File ID 2031126/S4179
Matrix: Water	_ab Sample (D: 20311131102
Sample wt/vol: Units	Case Collected: 11/12/03 Time: 1525
Level: (lowimed)	Date Received: 11/13/03
% Maisture: not dec.	Date Extracted:
	(mm) Date Analyzed: 11/26/03 T:me: 1705
Concentrated Extract Volume: (μL.) Dilution Factor: 1 Analyst RLW
Injection Volume: 1.0 (pL.) Prep Method:
GPC Cleanup: (Y/N) N pH:	Analytical Method: SW-846 8270C
	Instrument ID: MSSV2
Number TICs Found: 2	
CONCENTRATION UNITS:	
CAS NO. COMPOUND	RT EST. CONC. Q
1 301-02-0 9-Octadecenamice, (2)-	12.579 20.2
2. 301-02-0 9-Octadecenamice, (Z)-	14 194 50.2

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

Lab Name:	GCAL		Sample ID: S	SKGW59100	08		
Lab Code: LA024 Case No.:			Contract				
Lab Code:	LA024 Case No		Contract:				
Matrix: W	/ater		SAS No.:		SDG No.:	203111311	
Sample wt/	vol: 1000 Units: mL		Lab Sample ID	2031113	1103 Lab Fi	le ID: 2031126/S	
Level: (low/	med)		Date Collected	: 11/12/03	Time:	1105	
% Moisture	: decanted: (Y/N)		Date Received	: 11/13/03			
GC Column	: DB-5MS-30M ID: .25	(mm)	Date Analyzed	: 11/26/03	Time:	1732	
Concentrate	ed Sample Volume: 1000	(µL)	Dilution Factor	: <u>1</u>	Analy	st: RLW	
Soil Aliquot	Volume:	(µL)	Prep Method:			· · · · · · · · · · · · · · · · · · ·	
	olume: 2		Analytical Meth				
GPC Clean	up: (Y/N) N pH:		instrument ID:	MSSV2			
	RATION UNITS: ug/L		DECI II T	0	D.		
CAS NO.			RESULT	Q	RL	7	
95-95-4	2,4,5-Trichlorophenol		10.0	U	10.0	4	
88-06-2	2,4,6-Trichlorophenol		10.0	U	10.0	4	
120-83-2	2,4-Dichlorophenol		10.0	U	10.0		
51-28-5	2,4-Dinitrophenol		25.0	U	25.0	ไนา	
121-14-2	2,4-Dinitrotoluene		10.0	U I	10.0	4	
606-20-2 91-58-7	2,6-Dinitrotoluene		10.0	U	10.0	4	
95-57-8	2-Chloronaphthalene		10.0			4	
91-57-6	2-Chlorophenol		10.0		10.0	_	
88-74-4	2-Methylnaphthalene 2-Nitroaniline		25.0	U	25.0	{	
88-75-5	2-Nitrophenol		10.0 ·	Ü	10.0	1	
91-94-1	3,3'-Dichlorobenzidine		10.0	U	10.0	1	
99-09-2	3-Nitroaniline		25.0	U	25.0	1	
534-52-1	2-Methyl-4,6-dinitrophenol		25.0	U	25.0	1	
59-50-7	4-Chloro-3-methylphenol		10.0	- u -	10.0	{	
106-47-8	4-Chloroaniline		10.0	Ü	10.0	R	
7005-72-3	4-Chlorophenyl-phenylether		10.0	Ü	10.0	1''	
106-44-5	4-Methylphenol (p-Cresol)		10.0	U	10.0	1	
83-32-9	Acenaphthene		10.0	U	10.0	1 .	
208-96-8	Acenaphthylene		10.0	U	10.0	1	
120-12-7	Anthracene		10.0	U	10.0	1	
56-55-3	Benzo(a)anthracene		10.0	U	10.0	1	
50-32-8	Benzo(a)pyrene		10.0	U	10.0		
205-99-2	Benzo(b)fluoranthene		10.0	Ü	10.0		
191-24-2	Benzo(g,h,i)perylene		10.0	U	10.0		
207-08-9	Benzo(k)fluoranthene		10.0	U	10.0		
111-91-1	Bis(2-Chloroethoxy)methane		10.0	U	10.0		
111-44-4	Bis(2-Chloroethyl)ether		10.0	U	10.0		
108-60-1	bis(2-Chloroisopropyl)ether		10.0	U	10.0		
117-81-7	bis(2-ethylhexyl)phthalate		13.C 1.47	J	10.0	u	

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Samby D _S	K3W591 008		
Contract:			
SAS No.		SDG No.:	203111311
Lao Sampi e ID	20311131103	Lab File	ID: 2031126/S
Date Co-lected	11/12/03	Time:	1105
Date Received	11/13/03		
Date Analyzed	11/26/03	Time:	1732
Dilution Factor	1	Analyst	: RLW
Prep Method:			
Analytical Meth	od: OLMO 4.2		
instrument ID:	MSSV2		
RESULT	Q	RL	
RESULT	Q	<i>RL</i>	
10.0	U	10.0	
10.0 10.0	U	10.0	.e
10.0 10.0 10.0	U U	10.0 10.0 10.0	иſ
10.0 - 0.0 10.0 - 10.0	U U U	10.0 10.0 10.0 10.0	u Z xx
10.0 10.0 10.0 10.0 10.0	U U U U U U U U U U U U U U U U U U U	10.0 10.0 10.0 10.0 10.0	V
10.0 10.0 10.0 10.0 10.0	U U U U U U U U U U U U U U U U U U U	10.0 10.0 10.0 10.0 10.0 10.0	V
10.0 10.0 10.0 10.0 10.0 10.0	U U U U U U U U U U	10.0 10.0 10.0 10.0 10.0 10.0 10.0	V
	Contract: SAS No. Lab Sample ID Date Collected Date Received: Date Analyzed: Dilution Factor: Prep Method: Analytical Meth	SAS No. Lab Sample ID: 20311131103 Date Collected: 11/12/03 Date Received: 11/13/03 Date Analyzed: 11/26/03 Dilution Factor: 1 Prep Method:	SAS No. SDG No.: Lab Sample ID: 20311131103 Lab File Date Collected: 11/12/03 Time: Date Received: 11/13/03 Date Analyzed: 11/26/03 Time: Dilution Factor: 1 Analyst Prep Method: Analytical Method: OLMO 4.2

ONO NO.	COM COND	WEGGE	· ·	
101-55-3	4-Bromophenyt-phenylether	10.0	U	10.0
85-68-7	Butylbenzylphthaate	3.0	U	10.0
86-74-8	Carbazole	10.0	U	10.0
218-01-9	Chrysene	*0.0	U	10.0
84-74-2	Di-n-bulylphthaiate	•0.5	U	10.0
117-84-0	Di-n-octylphthalate	10.0	U	10.0
53-70-3	Dibenz(a,h)anthracene	10.0	υ	10.0
132-64-9	Dibenzofuran	13.0	U	10.0
84-66-2	Diethylphthalate	10.0	U	10.0
131-11-3	Dimethyl-phthalate	10.0	Ĵ	10.0
105-67-9	2,4-Dimethylpherol	10.0	U	10.0
206-44-0	Fluoranthene	10.0	U	10.0
86-73-7	Fluorene	10.0	U	10.0
118-74-1	Hexachiorobenzene	10 0	U	10.0
87-68-3	Hexachlorobutaciene	10.0	U	10.0
77-47-4	Hexachlorocyclopertadiene	10.1	υ	10.0
57-72-1	Hexachioroethane	10.0	U	10.0
193-39-5	Indeno(1,2,3-cd)pyrene	*5.0	บ	10.0
78-59-1	Isophorone	10.0	Ü	10.0
91-20-3	Naphthalene	10.0	U	10.0
100-01-6	4-Nitroaniline	25.3	υ	25.0
98-95-3	Nikrobenzene	10.0	U	10.0
100-02-7	4-Nitrophenol	25 .∂	บ	25.0
87- 8 6-5	Pentachiorophenol	25.0	Ü	25.0
85-01-8	Phenanthrene	10.0	IJ	10.0
108-95-2	Phenol	10 0	Ū	10.0
29-00-0	Ругеле	10.5	U	10.0
21-64-7	N-Nitroso-di-n-ordo amine	10.3	Ū	10.0
6-30-6	N-Nitrosodipheny amine	10.0	บ	10.0
95-48-7	o-Cresol	10.5	U	10.0
				

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET TENTATIVELY IDENTIFIED COMPOUNDS

Lab Name: GCAL	Sample ID: SKGW591008
Lab Code: LA024 2 Case No.:	Contract:
SAS No.: SDG No.: 203111311	Lab File ID: 2031126/S4180
Matrix: Water	Lab Sample ID: 20311131103
Sample wt/vol: Units:	Date Collected: 11/12/03 Time: 1105
Level: (low/med)	Date Received: 11/13/03
% Moisture: not dec.	Date Extracted:
GC Column: DB-5MS-30M	Date Analyzed: 11/26/03 Time: 1732
Concentrated Extract Volume: (µL)	Dilution Factor: 1 Analyst: RLW
Injection Volume: 1.0 (µL)	Prep Method:
GPC Cleanup: (Y/N) N pH:	Analytical Method: SW-846 8270C
	Instrument ID: MSSV2
Number TiCs Found: 2	
CONCENTRATION UNITS:	
CAS NO. COMPOUND	RT EST. CONC. Q
1 . 115-28-6 Bicyclo[2.2.1]hept-5-ene-2,3-d	11.105 123
2 301-02-0 9-Octadecenamide, (Z)-	14.182 12

SEMILOLATUE ORGANICS LINALYS (IDATA SHEET)

Lab Name:	GCAL		Sample 2.	SK GW6010	08	
	LA024 Case No.:		Contract			
Matric: W			SAS No :		SDG No.:	203111311
Sample wt/	volt 1000 Units: mL		Lat Sample (S	D: 2031113	 31104 Lab F	le ID: 2031201/S
	\					
	med)		Date Collected	11/1 <u>2/03</u>	Time:	1120
% Moisture:	decanted: (Y/N)		Date Received	1: 11/13/03	<u> </u>	
GC Column	: DB-5MS-30M iD: 25	(mm)	Date Analyzed	12/01/03	Time	1455
Concentrate	ed Sample Volume: 1000	(pL)	Dilution Factor	. 1	Analy	st RLW
Soil Aliquot	Volume:	(µL)	Prep Method:			
	Nume: 2		Analytical Met			
	up: (Y/N) N p=:	_	nstrument ID:	MSSV2		
	RATION UNITS: ug1.			_		
CAS NO.	COMPOUND		RESULT	Q	RL	_
95-95-4	2,4,5-Trichloropherol		10.0	U	10.0]
88-06-2	2,4,6-Trichloropnensi		10.0	U	10.0	
120-83-2	2,4-Dichlorophenol		10.0	U	10.0	4 .
51-28-5	2,4-Dinitrophenol		25.0	U	25.0]দ্ম
121-14-2	2,4-Dinitrotoluene		10.0	υ	10.0	
606-20-2	2,6-Dinitrotoluene		10.0	U	10.0	
91-58-7	2-Chloronaphthalene		10.0	U	10.0	
95-57-8	2-Chlorophenol		10.0	U	10.0	
91-57-6	2-Methylnaphthaiene		10.0	U	10.0	
88-74-4	2-Nitroaniline		25.0	U	25.0	_
88-75-5	2-Nitrophenol		10.0	U	10.0	
91-94-1	3,3-Dichlorobenzicine		10.5	U	10.0	
99-09-2	3-Nitroaniline		25.3	U	25.0	
534-52-1	2-Methyl-4,6-dinitrochenol		25.0	U	25.0	_
59-50-7	4-Chloro-3-methylichenol		10.0	U	10.0]_
106-47-8	4-Chloroaniine		10.0	U	10.0] K
	4-Chlorophenyl-phenylether		10.0	U	10.0	
106-44-5	4-Methylphenol (p-Cresol)		10.0	U	10.0	_
83-32-9	Acenaphthene		10.0	υ	10.0	}
208-96-8	Acenaphthylene		10.0	U	10.0	
120-12-7	Anthracene		10.0	บ	10.0	
56-55-3	Benzo(a)anthracene		10.0	U	10.0	
50-32-8	Benzo(a)pyrene		10.0	U	10.0	_
205-99-2	Benzo(b)fluorantnene		13.3	IJ	10.0	
191-24-2	Benzo(g,h,i)pery'ene		10.0	U	10.0	}
207-08-9	Benzo(k)fluoranthene		10.0	U	10.0	1
111-91-1	Bis(2-Chloroethoxy methane		10.0	U	10.0]
111-44-4	Bis(2-Chloroethyl)e:ner		10.0	U	10.0]
108-60-1	bis(2-Chloroisoprocy ether		10.0	U	10.0	1
117-81-7	bis(2-ethylhexyliph:naiate		اقداد تاری	J	10.0	lu

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Lab Name: GCAL		Sample ID: SKGW601008				
Lab Code:	LA024 Case No.:	Contract:				
Matrix: W		SAS No.:				
Sample wt/vol: 1000 Units: mt_		SAS No.: SDG No.: 203111311 Lab Sample ID: 20311131104 Lab File ID: 20312				
			, , , , , , , , , , , , , , , , , , , 			
Level: (low/med)		Date Collecte	d: 11/12/0	3 Time	: 1128	
% Moisture:	: decanted: (Y/N)	Date Receive	d: <u>11/13/0</u>	3		
GC Column	: <u>DB-5MS-30M</u> ID: <u>.25</u> (mm)	Date Analyze	d: 12/01/0	3 Time	e: 1455	
Concentrate	ed Sample Volume: 1000 (μL)	Dilution Facto	r: <u>1</u>	Ana	lyst: RLW	
Soil Aliquot	Volume: (µL)	Prep Method:				
	lume: 2 (µL)	Analytical Met				
	up: (Y/N) N pH:	Instrument ID:				
CONCENT	RATION UNITS: ug/L					
CAS NO.	COMPOUND	RESULT	Q	RL		
101-55-3	4-Bromophenyl-phenylether	10.0	U	10.0	7	
85-68-7	Butylbenzylphthalate	10.0	Ü	10.0		
86-74-8	Carbazole	10.0	U	10.0	_	
218-01-9	Chrysene	10.0	U	10.0		
84-74-2	Di-n-butylphthalate	10:00:803	J	10.0	ี นร	
117-84-0	Di-n-octylphthalate	10.0	U	10.0	Tus	
53-70-3	Dibenz(a,h)anthracene	10.0	U	10.0	\dashv $$	
132-64-9	Dibenzofuran	10.0	U	10.0	-	
84-66-2	Diethylphthalate	10.0	U	10.0	US orse	
131-11-3	Dimethyl-phthalate	10.0	U	10.0		
105-67-9	2,4-Dimethylphenol	10.0	Ū	10.0		
206-44-0	Fluoranthene	10.0	U	10.0		
86-73-7	Fluorene	10.0	U	10.0	┪	
118-74-1	Hexachlorobenzene	10.0	U	10.0	7	
87-68-3	Hexachlorobutadiene	10.0	Ü	10,0	┪	
77-47-4	Hexachlorocyclopentadiene	10.0	U	10.0	us	
67-72-1	Hexachloroethane	10.0	U	10.0	7	
193-39-5	Indeno(1,2,3-cd)pyrene	10.0	U	10.0		
78-59-1	Isophorone	10.0	U	10.0		
91-20-3	Naphthalene	10.0	U	10.0	45	
100-01-6	4-Nitroaniline	25.0	U	25.0	7	
98-95-3	Nitrobenzene	10.0	U	10.0	7	
100-02-7	4-Nitrophenol	25.0	IJ	25.0	7	
87-86-5	Pentachlorophenol	25.0	U	25.0	7	
85-01-8	Phenanthrene	10.0	Ú	10.0	7	
108-95-2	Phenol	10.0	U	10.0	7	
129-00-0	Pyrene	10.0	V	10.0	7	
621-64-7	N-Nitroso-di-n-propylamine	10.0	U	10.0	7	
86-30-6	N-Nitrosodiphenylamine	10.0	U	10.0	7	
95-48-7	o-Cresol	10.0	U	10.0		

95-48-7

SEMINOLATILE OFFSAN OS ANALYSIS DATA SHEET TENTAT RELI DENTA ED COMPOUNDS

Lab Name: GCAL	Sample (C Sk.G./V601008
Lab Code: LA024 2 Case No.:	Contract:
SAS No.: \$0.3 No.: 203111311	Lab File ID: _0031 201/\$4196
Matrix: Water	Lab Sample (D: 20311131104
Sample wt/vol: Units	Time: 1128
Level: (lowfmed)	Date Received: 11/13/03
% Maisture: not dec.	Cate Extracted:
GC Column: D8-5MS-30M 10: 25 (mm)	Date Analyzed: 12/01/03 Time: 1455
Concentrated Extract Volume: (µL)	Dilution Factor: 1 Analyst: RLW
Injection Volume: 1.0 (µL)	Prep Method:
GPC Cleanup: (Y/N) N pH:	Analytical Method: SW-846 8270C
Number TICs Found: 1 CONCENTRATION UNITS:	enstrument (D): MSSV2
CAS NO. COMPOUND	RT EST. CONC. Q
1 301-02-0 9-Octadecenamide, (Z)-	14.183 33.3

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

Lab Name: GCAL			Sample ID: SKGW62A1008				
Lab Code: LA024 Case No.:			Contract:				
Matrix: _W	/ater		SAS No.:		SDG No.	: 203111311	
Sample wt/	vol: 1000 Units: mL		Lab Sample II	D: 203111	131105 Lab	File ID: 2031126	
Level: (low/med)			Date Collected: 11/12/03 Time: 1201			: 1201	
	: decanted: (Y/N)		Date Received				
	n: DB-5MS-30M ID: .25)3 Tim	e 1825	
Concentrated Sample Volume: 1000 (µL)		Dilution Factor	: <u>1</u>	Ana	lyst: RLW		
Soil Aliquot	Volume:	_ (µL)	Prep Method:				
Injection Vo	olume: 2	(µL)	Analytical Met	hod: OLM	MO 4.2		
	up: (Y/N) N pH:		Instrument ID:	MSSV2			
CONCENT	RATION UNITS: ug/L						
	•			_			
CAS NO.			RESULT	Q	RL		
95-95-4	2,4,5-Trichlorophenol		10.0	U	10.0	_	
88-06-2	2,4,6-Trichlorophenol		10.0	Ü	10.0	_	
120-83-2	2,4-Dichlorophenol		10.0	U	10.0	-	
51-28-5	2,4-Dinitrophenol		25.0	U	25.0] W3	
121-14-2	2,4-Dinitrotoluene		10.0	U	10.0	4	
606-20-2	2,6-Dinitrotoluene		10.0	Ü	10.0	_	
91-58-7	2-Chloronaphthalene		10.0	U	10.0	-∤	
95-57-8 91-57-6	2-Chlorophenol		10.0 10.0	Ü	10.0		
88-74-4	2-Methylnaphthalene		25.0	- U	10.0 25.0		
	2-Nitroaniline			Ü		-{	
88-75-5 91-94-1	2-Nitrophenol 3,3'-Dichlorobenzidine		10.0	"	10.0	- [
99-09-2	3-Nitroaniline		25.0	U	25.0		
534-52-1	2-Methyl-4,6-dinitrophenol		25.0	Ü	25.0		
59-50-7	4-Chloro-3-methylphenol		10.0	U	10.0		
106-47-8	4-Chloroaniline		10.0	Ü	10.0	TR	
7005-72-3	4-Chlorophenyl-phenylether		10.0	Ü	10.0	⊣'`	
106-44-5	4-Methylphenol (p-Cresol)		10.0	Ū	10.0	-	
83-32-9	Acenaphthene		10.0		10.0	-{ .	
208-96-8	Acenaphthylene		10.0	-	10.0		
120-12-7	Anthracene		10.0	Ü	10.0	╡	
56-55-3	Benzo(a)anthracene		10.0	Ü	10.0	-	
50-32-8	Benzo(a)pyrene		10.0	U	10.0	~{	
205-99-2	Benzo(b)fluoranthene		10.0	Ū	10.0	7	
191-24-2	Benzo(g,h,i)perylene		10.0	-	10.0	┪	
207-08-9	Benzo(k)fluoranthene		10.0	Ū	10.0	7	
111-91-1	Bis(2-Chloroethoxy)methane		10.0	Ü	10.0	7	
111-44-4	Bis(2-Chloroethyl)ether		10.0	Ū.	10.0	1 .	
108-60-1	bis(2-Chloroisopropyl)ether		10.0	Ū	10.0	7	
117-81-7	his(2-ethylhexyl)ohthalate		10 0247	J	10.0	d u	

SEMIZOLAT LE CREAMICS ENALYS I DATA SHEET

Lab Name:	GCAL		Sample Dr. S	KGW62A1	338	
Lab Code:	LA024 Case No:		Contract:			
Marioc W	/aler		S4S No.:		SDG No.:	203111311
Sample wt/	volt 1000 Units:		Lab Sample ID:	2031113	—— 1105 Lab Fik	ID: 2031126
			Date Collected: 11/12/03			
Level: (low						1201
% Moisture	decarted: (Y/N)		Date Received:	11/13/03		
GC Column	iz DB-5MS-30M :D: .25	(mm)	Date Analyzed:	11/26/03	Time:	1825
Concentrate	ed Sample Volume: 1000	(µL)	Dilution Factor:	1	Analys	t: RLW
	Volume:		Prep Method:			
			•			
Injection Vo	lume:	_ (µL)	Analytical Metho	od: OLIMC	142	
GPC Clean	up: (Y/N) N pHt		Instrument ID:	MSSV2		<u> </u>
CONCENTI	RATION UNITS: Ug L					
CAS NO.	COMPOUND		RESULT	Q	RL	
101-55-3	4-Bromophenyl-phenylether		7C.0	U I	10.0	ı
85-68-7	Butylbenzylphtha are		70.0	u	10.0	
86-74-8	Carbazole		10.0	u	10.0	
218-01-9	+ 		10.0		10.0	
84-74-2	Chrysene					us
	Oi-n-butylphthalate		10.0102	<u> </u>	10.0	us
117-84-0	Di-n-octylphthalate		·c o	U	10.0	43
53-70-3	Diberiz(a,h)anthracene		10.0	U	10.0	I
132-64-9	Dibenzofuran	_	10.0	U	10.0	
84-66-2	Diethytphthalale		10.0	<u> </u>	10.0	
131-11-3	Dimethyl-phthalate		10.0	<u> </u>	10.0	
105-67-9	2,4-Dimethylphenoi		10.0	<u>U</u>	10.0.	
206-44-0	Fluoranthene		10.0	U	10.0	
86-73-7	Fluorene		*0.0	<u> </u>	10.0	
118-74-1	Hexachlorobenzene		10.0	<u></u>	10.0	
87-68-3	Hexachlorobutadiene		10.3	<u> </u>	10.0	
77474	Hexachlorocyclopentadiene		10.3	<u>U</u>	10.0	
67-72-1	Hexachloroethane		10.0	U	10.0	
193-39-5	Indano(1,2,3-cd)pyrene		10.0	U	10.0	
78-59-1	Isophorone		10.0	<u> </u>	10.0	
91-20-3	Naphthalene		10.0	U	10.0	
100-01-6	4-Nitroaniine		25.0	Ü	25.0	
96-95-3	Mitrobenzene		10.0	<u>U</u>	10.0	
100-02-7	4-Nitrophenal		25.0	<u>υ</u>	25.0	
87-86-5	Pentachlorophenoi	 -	25.0	<u> </u>	25.0	
85-01-8	Phenanthrene		10.0	U	10.0	
108-95-2	Phenol		10.0	<u> </u>	10.0	
129-00-0	Pyrene	····	10.0	<u> </u>	10.0	
521-64-7	N-Nitroso-di-n-propytamine		10.0	U	10.0	
86.30.6	M.Mitmeoriohamism sa		40 O	11	10.0	

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10.0

95-48-7

o-Cresol

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET TENTATIVELY IDENTIFIED COMPOUNDS

Lab Name: GCAL	Sample ID: SKGW62A1008
Lab Code: LA024 2 Case No.:	Contract:
SAS No.: SDG No.: 203111311	Lab File ID: 2031126/S4182
Matrix: Water	Lab Sample ID: 20311131105
Sample wt/vol: Units:	Date Collected: 11/12/03 Time: 1201
Level: (fow/med)	Date Received: 11/13/03
% Moisture: not dec.	Date Extracted:
GC Column: DB-5MS-30M ID: .25 (n	Date Analyzed: 11/26/03 Time: 1825
	Dilution Factor: 1 Analyst: RLW
	Prep Method:
GPC Cleanup: (Y/N) N pH:	Analytical Method: SW-846 8270C
	Instrument ID: MSSV2
Number TICs Found: 3	
CONCENTRATION UNITS:	
CAS NO. COMPOUND	RT EST. CONC. Q
1. Unknown	12.426 178
2 . 85-60-9 Phenol, 4,4'-butylidenebis[2-(13.864 13.2
3 . 301-02-0 9-Octadecenamide, (Z)-	14.196 42

18 SEMWOLATILE ORGANICS ANALYSIS DATA SHEET

Lab Name:	GCAL		Sample ID: S	KGW641008		
	EA024 Case No :		Contract:			
Matrix: Wa					SDG No.:	203111311
Sample wt/v	ol: 1000 Units: mL					e ID: 2031126/S
	ned)				Time:	
% Moisture:	decarted: (Y/N)		Date Received:	11/13/03		
GC Column	: <u>D8-5MS-30M</u> ID: <u>.25</u>	_ (mm)	Date Analyzed:	11/26/03	Time:	1852
Concentrate	d Sample Volume: 1300	_ (µL)	Dilution Factor:	1	Analys	t: RLW
Soil Aliquot	Volume:	(µL)	Prep Method:			
			Analytical Meth			
	ip: (Y/N) N pHt					
	NATION UNITS: UGL					
	COMPOUND		RESULT	0	RL	
		· ·				•
	2,4,5-Trichlorophero		10.0	U	10.0	l
88-06-2	2,4,6-Trichlorophero		10.0	U	10.0	Į
120-83-2	2,4-Dichloropheno		10.0	U	10.0	l.,,
51-28-5	2,4-Dinitrophenol		25.0	U	25.0	iki)
121-14-2	2.4-Dinitrololuene		10.0	U	10.0	ł
606-20-2	2.6-Dinitrotoluene		10.0	U	10.0	
91-58-7	2-Chloronaphthalere		10.0	U	10.0	l
95-57-8	2-Chlorophenol		10.0	U	10.0	
91-57-6	2-Methylnaphthalere		10.0	U	10.0	
88-74-4	2-Nitroaniine		25.0	U	25.0	
88-75-5	2-Nitrophenol		10.0		10.0	
91 -94- 1	3,3'-Dichlorobenzidine		10.0	U	10.0	
99-09-2	3-Nitroaniline		25.0	U	25.0	
534-52-1	2-Methyl-4,6-dinitrophenoi		25.0	U	25.0	
59-50-7	4-Chloro-3-methylphenol		10.0	U	10.0	
106-47-8	4-Chloroantine		10.0	U	10.0	K
7005-72-3	4-Chlorophenyl-phenylether		10.0	IJ	10.0	
106-44-5	4-Methylphenol (p-Cresox)		*0.0	IJ	10.0	
83-32-9	Acenaphihene		10.0	U	10.0	
206-96-8	Acenaphihylene		10.0	U	10.0	
120-12-7	Anthracene		.00	U	10.0	
56-55-3	Benzo(a)anthracene	-	10.0	U	10.0	
50-32-8	Benzo(a)pyrene		10.0	U	10.0	
205-99-2	Benzo(b)fluoranthere		100	IJ	10.0	
191-24-2	Benzo(g.h.i)perylene		10.0	U	10.0	
207-08-9	Benzo(k)fluoranthene		10 0	IJ	10.0	
111-91-1	Bis(2-Chloroethoxy imethane	~~	.00	U	10.0	
111-44-4	Bis(2-Chloroethyl)e: er		10.0	U	10.0	
	bis(2-Chloroisoprocy))ether		10.0	U	10.0	

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117-81-7 bis(2-ethythexyl)phtra ate

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

Lab Name: GCAL		Sample ID: _5	SKGW6410	008	
Lab Code: LA024 Case No.:		Contract:			
Matrix: Water		SAS No.:			203111311
Sample wt/vol: 1000 Units: mL				31106 Lab Fi	
Level: (low/med)				3 Time:	
% Moisture: decanted: (Y/N)		Date Received		<u></u>	
					
GC Column: DB-5MS-30M ID: .25	Date Analyzed	: 11/26/0	3 · Time:	1852	
Concentrated Sample Volume: 1000	(µL)	Dilution Factor	: 1	Analy	st: RLW
Soil Aliquot Volume:	(μL)	Prep Method:			
Injection Volume: 2		Analytical Meth			
GPC Cleanup: (Y/N) N pH:		Instrument ID:	MSSV2		
					
CONCENTRATION UNITS: ug/L					
CAS NO COMPOUND		DECLIIT	0	DI	
CAS NO. COMPOUND 101-55-3 4-Bromophenyl-phenylether		RESULT	Q	RL 10.0	٦
85-68-7 Butylbenzylphthalate		10.0	U	10.0	-
86-74-8 Carbazole		10.0	U	10.0	-
218-01-9 Chrysene	 	10.0	U	10.0	1
84-74-2 Di-n-butylphthalate		10.00.739	7	10.0	tus
117-84-0 Di-n-octylphthalate		10.0	U	10,0	นั้ง
53-70-3 Dibenz(a,h)anthracene		10.0	U	10.0	1
132-64-9 Dibenzofuran		10.0	U	10.0	1
84-66-2 Diethylphthalate		10.0	Ü	10.0	1
131-11-3 Dimethyl-phthalate		10.0	U	10.0	1
105-67-9 2,4-Dimethylphenol		10.0	U	10.0	1
206-44-0 Fluoranthene		10.0	Ú	10.0	1
86-73-7 Fluorene		10.0	U	10.0	1
118-74-1 Hexachlorobenzene		10.0	U	10.0	7
87-68-3 Hexachlorobutadiene		10.0	U	10.0	1
77-47-4 Hexachlorocyclopentadiene		10.0	U	10.0]
67-72-1 Hexachloroethane		10.0	U	10.0]
193-39-5 Indeno(1,2,3-cd)pyrene		10.0	U	10.0	}
78-59-1 Isophorone		10.0	U	10.0	1
91-20-3 Naphthalene		10.0	U	10.0	
100-01-6 4-Nitroaniline		25.0	U	25.0	1
98-95-3 Nitrobenzene		10.0	U	10.0	
100-02-7 4-Nitrophenol		25.0	U	25.0	Ì
87-86-5 Pentachlorophenol		25.0	U	25.0	j
85-01-8 Phenanthrene		10.0	U	10.0	
108-95-2 Phenol		10.0	U	10.0	
129-00-0 Pyrene		10.0	U	10.0	
621-64-7 N-Nitroso-di-n-propylamine		10.0	U	10.0	

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86-30-6

95-48-7

N-Nitrosodiphenylamine

o-Cresol

SEMMOLATUE ORBANICS ANALYSIS DATA SHEET TENTATIJELN DENTIFED DON DUNDS

Lab Name: GCAL	Sample D SKGW641008
Lab Code: LA024 2 Case No.:	Contract
SAS No.: SDG No.: 203111311	Lab File 1D: 2031126/\$4183
Matrix: Water	Lab Sample ID: 20311131106
Sample wit/vol: Units:	Date Collected: 11/12/03 Time: 1240
Level: (low/med)	Date Received: 11/13/03
% Moisture: not dec.	Date Extracted:
GC Column: DB-5MS-30M ID: .25 (mm)	Date Analyzed: 11/26/03 Time: 1852
Concentrated Extract Volume: (µL)	Dilution Factor: 1 Analyst RLW
Injection Volume: 1.0 (µL)	Prep Method:
GPC Cleanup: (Y/N) N pH:	Analytical Method: SW-846 8270C
	Instrument ID: MSSV2
Number TiCs Found: 1	
CONCENTRATION UNITS:	
CAS NO. COMPOUND	RT EST. CONC. Q
1 . 124-25-5 Octadecanamice	14 195 44.7

Lab Name:	GCAL		Sample ID:	SKGWER10)OB	
			•	383473616		
Lab Code:	LA024 Case No.:		Contract:			
Matrix: _W	/ater		SAS No.:		SDG No.	: 203111311
Sample wt/	vol: 1000 Units: mL		Lab Sample I	D: <u>203111</u>	31114 Lab	File ID: 2031126/
Levei: (low/	med)		Date Collecte	d: 11/13/0	3 Time	: 1510
	: decanted: (Y/N)		Date Receive	d: 11/14/0	3	
	: DB-5MS-30M ID: .25		Date Analyze	d: 11/26/0	3 Tim	e: 1919
	ed Sample Volume: 1000		-		Ana	
						1,011
	Volume:		Prep Method:			
Injection Vo	lume: 2	_ (µL)	Analytical Me	thod: OLM	10 4.2	
GPC Clean	up: (Y/N) N pH:		Instrument ID	: MSSV2		
CONCENT	RATION UNITS: ug/L					
CAS NO.	COMPOUND		RESULT	Q	RL	
95-95-4	2,4,5-Trichlorophenol		10.0	1. U	10.0	7
88-06-2	2,4,6-Trichlorophenol		10.0	l u	10.0	-
120-83-2	2,4-Dichlorophenol		10.0	 	10.0	-
51-28-5	2,4-Dinitrophenol		25.0	u	25.0	⊢ us
121-14-2	2,4-Dinitrotoluene		10.0	U	10.0	-
606-20-2	2,6-Dinitrotoluene	·	10.0	l ü	10.0	
91-58-7	2-Chloronaphthalene		10.0	 	10.0	
95-57-8	2-Chlorophenol		10.0	1 0	10.0	-
91-57-6	2-Methylnaphthalene		10.0	 	10.0	
88-74-4	2-Nitroaniline		25.0	U	25.0	
88-75-5	2-Nitrophenol		10.0	U	10.0	
91-94-1	3,3'-Dichlorobenzidine		10.0	U	10.0	
99-09-2	3-Nitroaniline		25.0	U	25.0	
534-52-1	2-Methyl-4,6-dinitrophenol		25.0	U	25.0	_
59-50-7	4-Chloro-3-methylphenol		10.0	 		-
106-47-8	4-Chloroaniline		10.0	U	10.0	- R
7005-72-3	4-Chlorophenyi-phenylether		10.0	- U	10.0	⊣ ``
106-44-5	4-Methylphenol (p-Cresol)		10.0	U	10.0	
83-32-9	Acenaphthene		10.0	U	10.0	-
208-96-8	Acenaphthylene		10.0	- u	10.0	
120-12-7	Anthracene		. 10.0	U	10.0	- .
						4
56-55-3	Benzo(a)anthracene	}	10.0	U	10.0	4
50-32-8	Benzo(a)pyrene		10.0	U	10.0	-
205-99-2	Benzo(b)fluoranthene		10.0	Ü	10.0	-
191-24-2	Benzo(g,h,i)perylene		10.0	U	10.0	-
207-08-9	Benzo(k)fluoranthene		10.0	U	10.0	4
111-91-1	Bis(2-Chloroethoxy)methane		10.0	U	10.0	4
111-44-4	Bis(2-Chloroethyl)ether		10.0	U	10.0	4
108-60-1	bis(2-Chloroisopropyl)ether	- 1	10.0	U	10.0	

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117-81-7

bis(2-ethylhexyl)phthalate

SEMIVOURTILE ORGANICS ANALYSIS DATA SHEET

Lab Name:	GCAL	<u>-</u>	Sample Dig	SKGW5810	08	
Lab Code:	LA024 Case No.:		Contract:			
Matric: Wa						No.: 203111311
Sample wt/v	olt: 1000 Units: mu		Lab Sample II	D: <u>203111</u>	31114 La	b File ID: 2031126/S
Level: (lowin	ned)		Date Collected	1: 11/13/0	3 Ti	me: <u>1510</u>
% Moisture:	decanted: (Y/N)		Date Received	i: <u>11/14/0</u> 3	3	
GC Column:	OB-5MS-30M iD: .25 (mar)	Date Analyzed	i: <u>11/26/0</u> 3	<u>. </u>	ime: 1919
Concentrate	d Sample Volume: 1000 (μĹ)	Dilution Factor	r. <u>1</u>	A	nalyst: RLW
Soil Aliquot	Volume: (μL)	Prep Method:			
	ume: (
	p: (Y/N) N pH:					
	COMPOUND		RESULT	Q	RL	
						 1
101-55-3	4-Bromophenyi-phenylether		10.0 5.13	U	10.0	
85-68-7	Butylbenzylphthalate		13.0	J U	10.0	
86-74-8	Channe		13.5	 	10.0	
218-01-9 84-74-2	Chrysene Di a hyddehthalate		10.00765	- 5	10.0	-lus
117-84-0	Di-n-butylphthalate Di-n-octylphthalate		10.0	Ü	10.0	~i3
53-70-3	Dibenz(a,h)anthracene		10.0	u	10.0	— u,
132-64-9	Dibenzoluran		10.0	- 0	10.0	
84-66-2	Diethylphthalate		10.0	U	10.0	
131-11-3	Dimethyl-phthalate		10.0	Ü	10.0	
105-67-9	2,4-Dimethylpheno		10.0	U	10.0	
206-44-0	Fluoranthene		10.0	U	10.0	-
86-73-7	Fluorene		13.3	U	10.0	
118-74-1	Hexachlorobenzene		10.0	U	10.0	
87-68-3	Hexachlorobutadiene		13.0	Ü	10.0	 .
77-47-4	Hexachlorocyclopentaciene		10.0	Ü	10.0	
67-72 -1	Hexachloroethane		10.0	υ	10.0	
193-39-5	Indeno(1,2,3-cd)pyrene		13.0	U	10.0	-
78-59-1	Isophorone		10.0	U	10.0	
91-20-3	Naphthalene		10.0	Ü	10.0	
100-01-6	4-Nitroaniline		25.0	U	25.0	
96-95-3	Mitrobanzene		100	U	10.0	
100-02-7	4-Nitrophenol		25.0	U	25.0	
87-86-5	Pentachioropheno		25.0	U	25.0	
85-01-8	Phenanthrene		100	U	10.0	

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108-95-2

129-00-0

621-64-7

86-30-6

95-48-7

Phenol

Pyrene

o-Cresol

N-Nitroso-di-n-propy amine

N-Nitrosodiphenylamine

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET TENTATIVELY IDENTIFIED COMPOUNDS

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Data File: var/chem/mssml.i 1.31126.s.c 34184.d Report Date: 39-Dec-2003 14:51

Gulf Coast Analytical Laboratories, Inc.

BNA QUANT AND RATIO REPORT

Data file : /var/chem/mssv2.i/2031126.s.b/s4184.d

Lab Smp Id: 20311131114 Client Smp ID: SKGW581008

Inst ID: mssv2.i

Comment :

Method : /var/chem/mssv2.i/2031126.s.b/CLP4.2_02.m.m Meth Date: 02-Dec-2003 14:45 rlw Quant Type: ISTD Cal Date: 26-NOV-2003 11:05 Cal File: s4166.d Als bottle: 21
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist:

Compound Sublist: all.sub

Target Version: 3.50 Processing Host: hpcs2

Concentration Formula: Amt * DF * Uf * "t/(Vo * Vi) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Uf	1.00000	ng unit correction factor
۷t	1000.00 003	Volume of final extract (uL)
Vo	1000.00 000	Volume of sample extracted (mL)
Vi	2.00000	Volume infected (uL)

Cpnd Variable Local Compound Variable

						CONCERTIF	ATIONS
		QUANT SIG				ON-COLUMN	FIMAL
C	ompowede.	MASS	RT	EXP RT PEL RT	RESPONSE	(ppm)	(ug/L)
••		***		******	******	****	*****
\$	1 2-Fluorophenol	112	3.961	3.849 1.7791	2625015	124.031	62.0
\$	3 Phenol-d5	99	4.657	4.645 [940	2993213	117.986	59.0
\$	6 2-Chlorophenol-d4	132	4 764	4.764 7 962)	2922409	121.128	60.6
•	\$ 1,4-Dichlorobenzene-d4	115	4.954	4 954 1.0001	359202	40.0000	
\$	9 1,2-Dichlorobenzene-d4	:52	5.128	5.396 1 031)	933601	67.4370	33.7
\$	16 Witrobenzene-d5	±2	5.512	5.500 - 885)	1716307	84.5401	42.3
•	23 Waphthalene-ds	135	6 225	6.225 (120)	2455689	40.0000	
\$	33 2-Fluorobiphesyl	171	7.449	7,437 (1903)	2754636	88.8657	44.4
	41 Acenaphthene-d10	164	8 245	8.245 (202)	1017099	40.0000	
\$	53 2.4.6-Tribromophenol	132	3 219	9,227 1 118	423777	155.236	77.6
•	Sa Phenanthrene-dl0	: # #	10 639	10.139 1 1001	1461629	40.0000	
	62 Di-n-butylphthalate	149	10 752	10 752 3711	73568	1.52948	0.765(a)
\$	65 Terphenyl-dl4	244	11 987	11 976 1 9031	1085337	45.1930	22.6

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

Lab Name:	GCAL		Sample ID:	SKGW58FC	1008	
Lab Code:	LA024 Case No.:		Contract:			
Matrix: W	/ater		•			: 203111311
Sample wt/	vol: 910 Units: mL		Lab Sample I	D: 203111	31115 Lab f	File ID: 2031126/
	med)		Date Collecte	d: 11/13/0	3 Time	: 1520
	: decanted: (Y/N)		Date Receive	d: 11/14/0:	3	
GC Column	n: DB-5MS-30M ID: .25	(mm)	Date Analyze	d: 11/26/0:	3 Time	e: 1947
Concentrate	ed Sample Volume: 1000	— (µL)	Dilution Facto	r: 1	Anal	lyst: RLW
Soil Aliquot Volume: (μL)			Prep Method:			
	olume: 2		Analytical Met			
	up: (Y/N) N pH:		Instrument ID:			
CONCENTI	RATION UNITS: ug/L COMPOUND		RESULT	Q	RL	
95-95-4	2,4,5-Trichlorophenol		11.0	1 0	11.0	- 7
88-06-2	2,4,6-Trichlorophenol		11.0	+	11.0	
120-83-2	2,4-Dichlorophenol		11.0	U	11.0	
51-28-5	2,4-Dinitrophenol		27.5	 	27.5	tis.
121-14-2	2,4-Dinitrotoluene		11.0	1 - 0	11.0	٦ ^٧ 2
606-20-2	2,6-Dinitrotoluene		11.0	 U	11.0	{
91-58-7	2-Chloronaphthalene		11.0	l u	11.0	{
95-57-8	2-Chlorophenol		11.0	 U	11.0	-{
91-57-6	2-Methylnaphthalene		11.0	U	11.0	
88-74-4	2-Nitroaniline		27.5	U	27.5	┪
88-75-5	2-Nitrophenol		11.0	 U	11.0	
91-94-1	3,3'-Dichlorobenzidine		11.0	1-0-	11.0	-{
99-09-2	3-Nitroaniline		27.5	 	27.5	
534-52-1	2-Methyl-4,6-dinitrophenol		27.5	U	27.5	
59-50-7	4-Chloro-3-methylphenol		11.0	U	11.0	4
106-47-8	4-Chloroaniline		11.0	T U	11.0	1 R
7005-72-3	4-Chlorophenyl-phenylether		11.0	U	11.0	7
106-44-5	4-Methylphenoi (p-Cresol)		11.0	Ū	11.0	7
33-32-9	Acenaphthene		11.0	U	11.0	7
208-96-8	Acenaphthylene		11.0	U	11.0	7
20-12-7	Anthracene		11.0	U	11.0	1
6-55-3	Benzo(a)anthracene		11.0	U	11.0	7
50-32-8	Benzo(a)pyrene		11.0	U	11.0	1
205-99-2	Benzo(b)fluoranthene		11.0	U	11.0	
91-24-2	Benzo(g,h,i)perylene		11.0	U	11.0	
207-08-9	Benzo(k)fluoranthene		11.0	υ	11.0	7
11-91-1	Bis(2-Chloroethoxy)methane		11.0	U	11.0	7
11-44-4	Bis(2-Chloroethyl)ether		11.0	U	11.0	1
08-60-1	bis(2-Chloroisopropyl)ether		11.0	U	11.0	7
17-81-7	bis(2-ethylhexyl)phthalate	11.0	10-0,12	j	11.0	Tu
	<u> </u>	++				-

ME SEMINOLAT LE IORGAN DE ANALME SIDATA SHEET

Lab Name: GCAL	Sample (D) SKGW58FD1008
Lab Code: LA024 Case No.:	Contract:
Matrix: Water	SAS No.: SDG No.: 203111311
Sample wt/volt 910 Units: mL	Lab Sample iD: 20311131115 Lab File ID: 2031126/S
Level: (lowimed)	Date Collected: 11/13/03 Time: 1520
% Moisture: decanted: (Y/N)	Date Received: 11/14/03
GC Column: DB-5MS-30M ID: 25 (mr	n) Date Analyzed: 11/26/03 Time: 1947
Concentrated Sample Volume: 100 (µl	.) Dilution Factor: 1 Analyst: RLW
Soil Aliquot Volume: (μt	Prep Method:
Injection Volume: 2 (µL	Analytical Method: OLMO 4.2
GPC Cleanup: (Y/N) N pH:	instrument ID: MSSV2

CONCENTRATION UNITS: ug1

CAS NO.	COMPOUND	RESULT	Q	RL
101-55-3	4-Bramaphenyl-phenylether	11.0	U	11.0
85-68-7	Butylbenzylphthaiate	11.0	U	11.0
86-74-8	Carbazole	11.0	U	11.0
218-01-9	Chrysene	11.0	U	11.0
84-74-2	Di-n-butyiphthalate 11.3	18-0 D-839	J	11.0
117-84-0	Di-n-octylohthalate	11.0	Ü	11.0
53-70-3	Dibenz(a,h)anthracene	11.0	U	11.0
132-64-9	Obenzoluran	11.0	U	11.0
84-66-2	Diethylphthalate	11.0	Ú	11.0
131-11-3	Dimethyl-phthalate	11.0	υ	11.0
105-67-9	2,4-Dimethylpheno	11.0	U	11.0
206-44-0	Fluoranthene	11.0	U	11.0
86-73-7	Fluorene	11.0	υ	11.0
118-74-1	Hexachlorobenzene	11.0	U	11.0
87-68-3	Hexachlorobutaciene	11.9	U	11.0
77-47-4	Hexachlorocyclopentaciene	11.0	บ	11.0
67-72-1	Hexachioroethane	11.0	U	11.0
193-39-5	Indeno(1,2,3-cd)pyrene	1.0	Ü	11.0
78-59-1	Isophorone	11.0	U	11.0
91-20-3	Naphthalene	11.0	U	11.0
100-01-6	4-Nibroaniline	27.5	U	27.5
96-95-3	Nitrobenzene	11.3	U	11.0
100-02-7	4-Nitrophenol	27.5	U	27.5
87-86-5	Pentachioropheno:	27.5	U	27.5
85-01-8	Phenanthrene	11.3	U	11.0
106-95-2	Phenol	11.0	U	11.0
129-00-0	Pyrene	11.0	U	11.0
521-64-7	N-Nitroso-di-n-propyiam ne	11.0	U	11.0
86-30-6	N-Nitrosodiphenytamine	11.0	บ	11.0
95-48-7	o-Cresol	:1.0	U :	11.0

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SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET TENTATIVELY IDENTIFIED COMPOUNDS

Lab Name: GCAL	Sample ID: SKGW58FD1008	
Lab Code: LA024 2 Case No.:	Contract:	
SAS No.: SDG No.: 203111311	Lab File ID: 2031126/S4185	
Matrix: Water	Lab Sample ID: 20311131115	
Sample wt/vol: Units:	Date Collected: 11/13/03 Time: 1520	
Level: (low/med)	Date Received: 11/14/03	
% Moisture: not dec.	Date Extracted;	
GC Column: DB-5MS-30M ID: .25 (mm)	Date Analyzed: 11/26/03 Time: 1947	
Concentrated Extract Volume: (µL)	Dilution Factor: 1 Analyst: RLW	
Injection Volume: 1.0 (µL)	Prep Method:	
GPC Cleanup: (Y/N) N pH:	Analytical Method: SW-846 8270C	
	Instrument ID: MSSV2	
Number TICs Found: 1		
CONCENTRATION UNITS:		
CAS NO. COMPOUND	RT EST. CONC. Q	
1. 301-02-0 9-Octadecenamide, (Z)-	14.197 45.4	

18 SEMINOLATILE ORGANICS ANALYSIS DATA SHEET

Lac Name:	GCAL	Sample_Dr <u>S</u>	KGWFB100	8	
Lab Code:	LA024 Case No.:	Contract:			
Matrix: W	aler	SAS No.:		SDG No.:	203111311
Sample w/A	volt: 1000 Units: mL	Lab Sample ID:	20311131	116 Lab Fi	le ID: 2031126/S
Level: (low)	med)	Date Collected:	11/13/03	Time:	1545
% Moisture:	decanted: (Y/N)	Date Received:	11/14/03		
GC Column	: D8-5MS-30M ID: 25 (mm	-) Date Analyzed:	11/26/03	Time:	2016
Concentrate	id Sample Volume: 1000 (pt.)) Dilution Factor.	1		st RLW
		_			
SOII ANGLIOL	Volume: (µL	,			
Injection Vol	lume: 2 (µL)) Analytical Meth	od: OLMO	4.2	
GPC Cleans	pp: (Y/N) N pH:	Instrument ID:	MSSV2		· · · · · · · · · · · · · · · · · · ·
CONCENTR	RATION UNITS: ug/L COMPOUND	RESULT	Q	RL	
95-95-4	2,4,5-Trichiorocheroi	10.0		10.0	7
88-06-2	2,4,6-Trichlorophenox	10.0	- i - l	10.0	┪
120-83-2	2,4-Dichlorophenol	10.0	- i - l	10.0	1
51-28-5	2,4-Dinitrophenol	25.0	-	25.0	tus -
121-14-2	2,4-Dinitrotoluene	10.0	υ	10.0	† "
606-20-2	2,6-Dinitrotoluene	10.0	U	10.0	†
91-58-7	2-Chloronaphthalene	10.0	U	10.0	1
95-57-8	2-Chlarophenoi	10.0	U	10.0	7
91-57-6	2-Mothylnaphthalene	10.0	U	10.0	7
88-74-4	2-Nitroaniline	25.0	U	25.0	- i
88-75-5	2-Nitrophenol .	*C.O	U	10.0	-
91-94-1	3,3'-Dichlorobenzidine	10.0	U	10.0	1
99-09-2	3-Nitroaniline	25.0	U	25.0	
534-52-1	2-Methyl-4,6-dinitrophenol	25.0	U	25.0	
59-50-7	4-Chloro-3-methylphenol	:00	U	10.0	
106-47-8	4-Chloroaniine	10.0	IJ	10.0	R
7005-72-3	4-Chiorophenyl-phenylether	13.0	U	10.0	<u>-</u> I
106-44-5	4-Mathylphenol (p-Cresoi)	10.0	U	10.0	
83-32-9	Acenaphthene	19.0	U	10.0	
208-96-8	Acenaphthylene	10.0	U	10.0	
120-12-7	Anthracene	10.0	U	10.0	
56-55-3	Benzo(a)anthracene	10.0	U	10.0	
50-32-8	Benzo(a)pyrene	10.0	U	10.0	•
205-9 9 -2	Benzo(b)fluoranthene	10.0	V	10.0	•
191-24-2	Benzo(g,h,i)perylene	10.0	υ	10.0	•
207-08-9	Benzo(k)@uoranthene	10.0	U	10.0	•
111-91-1	Bis(2-Chloroethoxy)methane	10.0	U	10.0	·
111-44-4	Bis(2-Chloroethyl)ether	13.0	U	10.0	
108-60-1	bis(2-Chloroisopropyl)etter	10.0	U	10.0	
117-81-7	bis(2-ethylhexyl)phthalate	ic.5187	J	10.0	u

1B SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

Lab Name: GCAL	Sample ID: SKGWFB1008
Lab Code: LA024 Case No.:	Contract:
Matrix: Water	SAS No.: SDG No.: 203111311
Sample wt/vol: 1000 Units: mL	Lab Sample ID: 20311131116
Level: (low/med)	Date Collected: 11/13/03 Time: 1545
% Moisture: decanted: (Y/N)	Date Received: 11/14/03
GC Column: DB-5MS-30M ID: .25 (mm)	Date Analyzed: 11/26/03 Time: 2016
Concentrated Sample Volume: 1000 (μL)	Dilution Factor: 1 Analyst: RLW
Soil Aliquot Volume: (μL)	Prep Method:
Injection Volume: 2 (µL)	Analytical Method: OLMO 4.2
GPC Cleanup: (Y/N) N pH:	Instrument ID: MSSV2
CONCENTRATION UNITS: ug/L	
CAS NO. COMPOUND	RESULT Q RL

CAS NO.	COMPOUND	RESULT	Q	RL
101-55-3	4-Bromophenyl-phenylether	10.0	U	10.0
85-68 <i>-</i> 7	Butylbenzylphthalate	10.0	U	10.0
86-74-8	Carbazole	10.0	U	10.0
218-01-9	Chrysene	10.0	U	10.0
84-74-2	Di-n-butylphthalate	10,00:484	J	10.0
117-84-0	Di-n-octylphthalate	10.0	U	10.0
53-70-3	Dibenz(a,h)anthracene	10.0	U	10.0
132-64-9	Dibenzofuran	10.0	U	10.0
84-66-2	Diethylphthalate	10.0	U	10.0
131-11-3	Dimethyl-phthalate	10.0	U	10.0
105-67-9	2,4-Dimethylphenol	10.0	U	10.0
206-44-0	Fluoranthene	10.0	U	10.0
86-73-7	Fluorene	10.0	U	10.0
118-74-1	Hexachlorobenzene	10.0	U	10.0
87-68-3	Hexachlorobutadiene	10.0	U	10.0
77-47-4	Hexachlorocyclopentadiene	10.0	U	10.0
37-72-1	Hexachloroethane	10.0	U	10.0
193-39-5	Indeno(1,2,3-cd)pyrene	10.0	U	10.0
78-59-1	Isophorone	10.0	U	10.0
1-20-3	Naphthalene	10.0	U	10.0
100-01-6	4-Nitroaniline	25.0	U	25.0
98-95-3	Nitrobenzene	10.0	J	10.0
100-02-7	4-Nitrophenol	25.0	U	25.0
37-86-5	Pentachlorophenol	25.0	U	25.0
35-01-8	Phenanthrene	10.0	U	10.0
108-95-2	Phenol	10.0	U	10.0
129-00-0	Pyrene	10.0	U	10.0
21-64-7	N-Nitroso-di-n-propylamine	10.0	U	10.0
36-30-6	N-Nitrosodiphenylamine	10.0	U	10.0
95-48-7	o-Cresol	10.0	U	10.0
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SEM /OLATILE ORGANICS HVALMS SIDATA SHEET TENTATMELY IDENTIFIED COMPOUNDS

Lab Name: GCAL	Sample ID: SKGWFB1008
Lab Code: LA024 2 Case No.:	Contract
SAS No.: 203111311	Lab File : 2031126/S4186
Matrix: Water	ab Sample ID: 20311131116
Sample w/voit: Units:	Date Collected: 11/13/03 Time: 1545
Level: (low/med)	Date Received: 11/14/03
% Moisture: not dec.	Date Extracted:
GC Column: D8-5MS-30M iD: .25 (mm)	Date Analyzed: 11/26/03 Time: 2016
Concentrated Extract Volume: (µL)	Dilution Factor: 1 Analyst RLW
Injection Volume: 1.0 (µL)	Prep Method:
GPC Cleanup: (Y/N) N pH:	Analytical Method: SW-846 8270C
	instrument ID: MSSV2
Number TiCs Found: 1	
CONCENTRATION UNITS:	
CAS NO. COMPOUND	RT EST. CONC. Q
1 . 301-02-0 9-Octadecenamice, (Z)-	14,195 28

18 SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

Lab Name:	GCAL		Sample ID:	SKGW261	800		
Lab Code:	LA024 Case No.:		Contract:				
Matrix: W	/ater		SAS No.:		SE	OG No.: 2	203111311
Sample wt/	vol: 1000 Units: mL		Lab Sample II			_	D: 20311 2 6/
Levei: (low/med)		,	Date Collected	d: 11/14/0)3	Time: 12	240
	: decanted: (Y/N)		Date Received	d: 11/15/0)3		
GC Column	n: DB-5MS-30M ID: .25	(mm)	Date Analyzed	1: 11/26/0)3	Time: 1	542
	ed Sample Volume: 1000	_	Dilution Factor				
	Volume:		Prep Method:				
	olume: 2		Analytical Met				
	up: (Y/N) N pH:		-				
GFO Clean	op. (1714) 14 pri.		Instrument ID:	100072	··		
CONCENTA	RATION UNITS: ug/L						
042.40	COMBOUND		DECLU T	^	_	.,	
CAS NO.	· 		RESULT	Q		?L	
95-95-4	2,4,5-Trichlorophenol		10.0	U	10.		
88-06-2	2,4,6-Trichlorophenol		10.0	U	10.		
120-83-2	2,4-Dichlorophenol		10.0	U	10.		<
51-28-5 121-14-2	2,4-Dinitrophenol 2,4-Dinitrotoluene		25.0 10.0	U	25.		۷
606-20-2	2,6-Dinitrotoluene		10.0		10.		
91-58-7	2-Chloronaphthalene		10.0	U	10.		
95-57-8	2-Chlorophenol		10.0	U	10.		
91-57-6	2-Methylnaphthalene		10.0	U U	10.		
88-74-4	2-Nitroaniline		25.0	U	25.		
88-75-5	2-Nitrophenol		10.0	Ü	10.		
91-94-1	3,3'-Dichlorobenzidine		10.0	U	10.		
99-09-2	3-Nitroaniline		25.0	Ü	25.		
534-52-1	2-Methyl-4,6-dinitrophenol		25.0	U	25.		
59-50-7	4-Chloro-3-methylphenol		10.0	U	10.0		
106-47-8	4-Chloroaniline		10.0	U	10.0	0 1	R
7005-72-3	4-Chlorophenyl-phenylether		10.0	U	10.	0	,
106-44-5	4-Methylphenol (p-Cresol)		10.0	U	10.0	ō	
83-32-9	Acenaphthene		10.0	U	10.0	0	
208-96-8	Acenaphthylene		10.0	U	10.0	ō	
120-12-7	Anthracene		10.0	U	10.0	ō	
56-55-3	Benzo(a)anthracene		10.0	U	10.0	0	
50-32-8	Benzo(a)pyrene		10.0	U	10.0	5	
205-99-2	Benzo(b)fluoranthene		10.0	U	10.0	J .	
191-24-2	Benzo(g,h,i)perylene		10.0	U	10.0	5	
207-08-9	Benzo(k)fluoranthene		10.0	U	10.0	5	
111-91-1	Bis(2-Chloroethoxy)methane		10.0	U	10.0	,	
111-44-4	Bis(2-Chloroethyl)ether		10.0	U	10.0	5	

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10.0

10.0

10.0

10,0201

108-60-1

117-81-7

bis(2-Chloroisopropyl)ether

bis(2-ethylhexyl)phthalate

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Lab Name:	GCAL		Sample Dr. <u>S</u>	KGW251008	· <u> </u>	
Lab Code:	EA024 Case No.:		Contract			
Matrix: W	/ater		SAS No.		_ SDG No.:	203111311
Sample w/	Valt 1000 Units: mL		Lab Sample ID:	203111311	21LabF	le ID: 2031126/S
Level: (low	med)		Date Collected:	11/14/03	Time:	1240
% Moisture	c decanted: (Y/N)		Date Received:	11/15/03		
GC Column	n: DB-5MS-30M ID: 25	(mm)	Date Analyzed:	11/26/03	Time	: 1542
Concentrate	ed Samole Volume: 1000	 (μL)	Dilution Factor:	1	Anah	yst: RLW
Soil Aliquot	Volume:		Prep Method:			<u> </u>
Injection Vo		— (pL)	Analytical Meth	od: OLMO 4	2	
	up: (Y/N) N pH:	_	Instrument :D:		· <u>-</u>	
	RATION UNITS: ug/L		DECLU T	•	DI	
	COMPOUND		RESULT	Q	10.0	٦.
101-55-3 85-68-7	4-Bromophenyl-phenylether		10.0	U	10.0	4
86-74-8	Butylbenzylphthalate Carbazole	·	10.0		10.0	-
218-01-9	Chrysene		10.0	U	10.0	-}
84-74-2	Di-n-butylphthalate		C. CO-094	- j - 	10.0	1 115
117-84-0	Di-n-octylohthalate		10.0	- ŭ	10.0	ี นี้วั
53-70-3	Dibenz(a,h)anthracene		10.0	U	10.0	⊣ ~
132-64-9	Dibenzofuran		10.0	- 0	10.0	-
84-66-2	Diethylphthalate		10.0	U	10.0	-
131-11-3	Dimetryl-phthalate		10.0	_	10.0	
105-67-9	2,4-Dimethylphenoi		10.0	U	10.0	_
206-44-0	Fluoranthene		10.C	Ü	10.0	- i
86-73-7	Fluorene		10.C	U	10.0	_
118-74-1	Hexachiorobenzene		10.0	U	10.0	-
87-68-3	Hexachlorobutadiene		10.0	Ü	10.0	-
77-47-4	Hexachiorocyclopentadiene		-0.0	Ü	10.0	-
67-72-1	Hexachloroethane		10.0	U	10.0	-
193-39-5	Indeno(1,2,3-cd)pyrene		2.01	IJ	10.0	_
78-59-1	Isophorone	,	-0.0	Ü	10.0	-
91-20-3	Naphihalene		10.0	บ	10.0	-
100-01-6	4-Nitroaniline		25.0	บ	25.0	_
98-95-3	Nikrobenzene		10.0	ับ	10.0	-
100-02-7	4-Nitrophenol		25.0	U	25.0	_
87-86-5	Pentachlorophenoi		25.0	U	25.0	_
85-01-8	Phenanthrene		°C.0	U	10.0	-
108-95-2	Phenol		10.0	U	10.0	- -
129-00-0	Pyrene		10.0	U	10.0	_
621-64-7	N-Nitroso-di-n-propy amine		.00	IJ	10.0	-
86-30-6	N-Nitrosodiphenyram ne		*0.0	U	10.0	_
95-48-7	o-Cresol		.00	il	10.0	-

1F SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET TENTATIVELY IDENTIFIED COMPOUNDS

Lab Name: GCAL	Sample ID: SKGW261008
Lab Code: LA024 2 Case No.:	Contract:
SAS No.: SDG No.: 203111311	Lab File ID: 2031126/S4176
Matrix: Water	Lab Sample ID: 20311131121
Sample wt/vol: Units:	Date Collected: 11/14/03 Time: 1240
Level: (low/med)	Date Received: 11/15/03
% Moisture: not dec.	Date Extracted:
GC Column: DB-5MS-30M ID: .25 (mm)	Date Analyzed: 11/26/03 Time: 1542
Concentrated Extract Volume: (µL)	Dilution Factor: 1 Analyst: RLW
Injection Volume: 1.0 (µL)	D.: 14 # 1
GPC Cleanup: (Y/N) N pH:	Analytical Method: SW-846 8270C
	Instrument ID: MSSV2
Number TICs Found: 5	
CONCENTRATION UNITS:	
CAS NO. COMPOUND	RT EST. CONC. Q
1 . 120-40-1 Dodecanamide, N,N-bis(2-hydrox	8.541 13.7
2. 57-10-3 Hexadecanoic acid	10.716 17.6
3 . 112-80-1 Oleic Acid	11.595 34.2
4 . 85-60-9 Phenol, 4,4'-butylidenebis[2-(13.876 47.7
5 301-02-0 Q-Octadecenamide (7)	14 107 54 1

SEMINIDUAT LE ORGANICS ANALYS (DATA SHEET

Lab Name: GCAL		Sample J	SK 3W301008		
Lab Code: LA024 Case No.:		Contract			
Matrix: Water		SAS No.:		SDG No.:	203111311
Sample wt/vol: 1000 Units: mL	-	Lab Sample II	203111311	22 Lab Fik	ID: 2031126/S
Level: (low/med)		Date Collected	1: 11/14/03	Time;	1015
% Moisture: decanted: (Y'N'		Date Received	i: 11/15/03		
GC Column: 08-5MS-30M ID: 25	5 (mm)	Date Analized	11/26/03	Time:	1322
Concentrated Sample Volume: 1000	(µL)	Dilution Factor	: 1	Analys	t: RLW
Soil Aliquot Volume:	(µL)	Prep Method:		-	
Injection Volume: 2	(µL)	Analyticai Meti	nod: OLMO 4	.2	
GPC Cleanup: (Y/N) N pH;		Instrument ID:	MSSV2		
CONCENTRATION UNITS: Ug/L CAS NO. COMPOUND		RESULT	0	DI.	
		·	Q	RL_	•
95-95-4 2,4,5-Trichloropheno		10.5	<u> </u>	10.0	
88-06-2 2,4,6-Trichlaropheno		10.0	U .	10.0	
120-83-2 2.4-Dichloropheno		25.0	U	10.0	us
51-28-5 2,4-Dinitrophenol 121-14-2 2,4-Dinitrotoluene		10.0	U U	25.0 10.0	~
<u> </u>		100	U		
		10 0	- U	10.0	
91-58-7 2-Chloronaphthaiene 95-57-8 2-Chlorophenoi		10.0	U	10.0	
91-57-6 2-Methylnaphthaene		10.0	U	10.0	
88-74-4 2-Nitroanline		25 0		25.0	
88-75-5 2-Nitrophenol		10.0	U	10.0	
91-94-1 3,3-Dichlorobenzidine		10 0	U	10.0	
99-09-2 3-Nitroaniline		25.0	U	25.0	
534-52-1 2-Methyl-4,6-din-trophenoi		25 0	- u -	25.0	
59-50-7 4-Chloro-3-methylchenol		10.0	U	10.0	
106-47-8 4-Chloroaniine	·	10.0	U	10.0	R
7005-72-3 4-Chlorophenyl-chenylether		10.0	Ü	10.0	"
106-44-5 4-Methylphenol (p-C/esol)	 -	10.0	U	10.0	
83-32-9 Acenaphthene		10.2	υ	10.0	
208-96-8 Acenaphthylene		10.0	Ű	10.0	
120-12-7 Anthracene		10.0	U	10.0	
56-55-3 Benzo(a)anthracene	 -	10.0	U	10.0	
50-32-8 Benzo(a)pyrene	 -		Ü	10.0	
205-99-2 Benzo(b) fluoranthene	 -	• 0.0	U	10.0	
191-24-2 Benzo(g.h,i)perylene		10.0	U	10.0	
207-08-9 Benzo(k)fluoranmene		10.0	Ū T	10.0	
111-91-1 Bis(2-Chloroethox) methane		100	U	10.0	
111-44-4 Bis(2-Chloroethyr)ether		10.0	U	10.0	
108-60-1 bis(2-Chloroisopropyt)ether		10.0	U	10.0	
117-81-7 bis(2-ethylhexy onthalate	<u> </u>	0.508.5	J		u
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SEMIVOLATILE	ORGANICS	ANALYSIS	DATA	SHEET

Lab Name: GCAL	Sample ID: SKGW301	008
Lab Code: LA024 Case No.:	Contract:	
Matrix: Water	SAS No.:	SDG No.: 203111311
Sample wt/vol: 1000 Units: mL	Lab Sample ID: 20311	131122 Lab File ID: 2031126/S
Level: (low/med)	Date Collected: 11/14/	03 Time: 1015
% Moisture: decanted: (Y/N)	Date Received: 11/15/	03
GC Column: DB-5MS-30M ID: .25 (mm)	Date Analyzed: 11/26/0	03 Time: 1322
Concentrated Sample Volume: 1000 (µL)	Dilution Factor: 1	Analyst: RLW
Soll Aliquot Volume: (μL)	Prep Method:	
injection Volume: 2 (μL)	Analytical Method: OLI	MO 4.2
GPC Cleanup: (Y/N) N pH:	Instrument ID: MSSV2	
CONCENTRATION UNITS: ug/L		
CAS NO. COMPOUND	RESULT Q	RL
101-55-3 4-Bromophenyl-phenylether	10.0 U	10.0

CAS NO.	COMPOUND	RESULT	Q	RL
101-55-3	4-Bromophenyl-phenylether	10.0	U	10.0
85-68-7	Butylbenzylphthalate	10.0	U	10.0
86-74-8	Carbazole	10.0	U	10.0
218-01-9	Chrysene	10.0	Ū	10.0
84-74-2	DI-n-butylphthalate	10.00.519	J	10.0
117-84-0	Di-n-octylphthalate	10.0	U	10.0
53-70-3	Dibenz(a,h)anthracene	10.0	Ü	10.0
132-64-9	Dibenzofuran	10.0	U	10.0
84-66-2	Diethylphthalate	10.0	U	10.0
131-11-3	Dimethyl-phthalate	10.0	U	10.0
105-67-9	2,4-Dimethylphenol	10.0	U	10.0
206-44-0	Fluoranthene	10.0	U	10.0
86-73-7	Fluorene	10.0	U	10.0
118-74-1	Hexachlorobenzene	10.0	U	10.0
87-68-3	Hexachlorobutadiene	10.0	U	10.0
77-47-4	Hexachlorocyclopentadiene	10.0	U	10.0
67-72-1	Hexachloroethane	10.0	U	10.0
193-39-5	indeno(1,2,3-cd)pyrene	10.0	U	10.0
78-59-1	Isophorone	10.0	U	10.0
91-20-3	Naphthalene	10.0	Ü	10.0
100-01-6	4-Nitroaniline	25.0	U	25.0
98-95-3	Nitrobenzene	10.0	U	10.0
100-02-7	4-Nitrophenol	25.0	U	25.0
87-86-5	Pentachlorophenot	25.0	U	25.0
35-01-8	Phenanthrene	10.0	Ų	10.0
108-95-2	Phenol	10.0	U	10.0
129-00-0	Pyrene	10.0	Ŭ	10.0
521-64-7	N-Nitroso-di-n-propylamine	10.0	U	10.0
36-30-6	N-Nitrosodiphenylamine	10.0	U	10.0
95-48-7	o-Cresol	10.0	U	10.0

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SEMINOLAT LE ORGANION PNALMS SI DATA SHEET TENTATNELMI DEL TIFED COMPOUNDS

Lab Name: GCAL	Sample ID: SKGW301308
Lab Code: LA024 2 Case No.:	Contract:
SAS No.: SDG No.: 203:11'311	ab File D: 2031126/S4171
Matrix: Water	Lab Sample ID: 20311131122
Sample wt/vol: Units:	Date Collected: 11/14/03 Time: 1015
Level: (low/med)	Date Received: 11/15/03
% Moisture: not dec.	Date Extracted:
GC Column: D8-5MS-30M iD: 25 (mm)	Date Analyzed: 11/26/03 Time: 1322
Concentrated Extract Volume: (µL)	Dilution Factor: 1 Analyst: RLW
Injection Volume: 1.0 (µL)	Prep Method:
GPC Cleanup: (Y/N) N pH:	Analytical Method: SW-846 8270C
	Instrument 'D: MSSV2
Number TICs Found: 2	
CONCENTRATION UNITS:	
CAS NO. COMPOUND	RT EST. CONC. Q
1 . 85-60-9 Phenol, 4,4'-butylicenebis(2-(13.364 22.5
2 301-02-0 9-Octadecenamice (Z)-	14.185 36.5

Lab Name:	GCAL		Sample ID:	SKGW6110	008	
Lab Code:	LA024 Case No.:		Contract:			
Matrix: W	/ater		SAS No.:	· · · · · · · · · · · · · · · · · · ·	SDG No.:	203111311
Sample wt/	vol: 1000 Units: mL		Lab Sample I	D: 203111	31123 Lab F	ile ID: 2031126/S
Level: (low/	med)		Date Collecte	d: <u>11/14/0</u>	3 Time:	1100
% Moisture	: decanted: (Y/N)		Date Receive	d: <u>11/15/0</u>	3	······································
GC Column	: DB-5MS-30M ID: .25	_ (mm)	Date Analyze	d: 11/26/0	3 Time	: 1349
Concentrate	ed Sample Volume: 1000	_ (µL)	Dilution Facto	or: <u>1</u>	Analy	/st: RLW
Soil Aliquot	Volume:	_ (µL)	Prep Method:			
Injection Vo	lume: 2	_ (µL)	Analytical Me	thod: OLM	10 4.2	
GPC Clean	up: (Y/N) N pH:		Instrument ID	: MSSV2		
CONCENTI	RATION UNITS: ug/L					
CAS NO.	COMPOUND		RESULT	Q	RL	
95-95-4	2,4,5-Trichlorophenol		10.0	U	10.0	٦
88-06-2	2,4,6-Trichlorophenol		10.0	Ü	10.0	1
120-83-2	2,4-Dichlorophenol		10.0	U	10.0	7
51-28-5	2,4-Dinitrophenol		25.0	U	25.0	\
121-14-2	2,4-Dinitrotoluene		10.0	U	10.0	7
606-20-2	2,6-Dinitrotoluene		10.0	Ü	10.0	1
91-58-7	2-Chloronaphthalene		10.0	U	10.0	1
95-57-8	2-Chlorophenol		10.0	U	10.0	7
91-57-6	2-Methylnaphthalene		10.0	U	10.0	1
88-74-4	2-Nitroaniline		25.0	U	25.0	1
88-75-5	2-Nitrophenol		10.0	U	10.0	7
91-94-1	3,3'-Dichlorobenzidine		10.0	U	10.0	1
99-09-2	3-Nitroaniline		25.0	U	25.0	7
534-52-1	2-Methyl-4,6-dinitrophenol		25.0	U	25.0	1
59-50-7	4-Chloro-3-methylphenol		10.0	U	10.0	
106-47-8	4-Chloroaniline		10.0	Ü	10.0	7 R
7005-72-3	4-Chlorophenyl-phenylether		10.0	U	10.0]
106-44-5	4-Methylphenol (p-Cresol)		10.0	C	10.0]
83-32-9	Acenaphthene		10.0	U	10.0]
208-96-8	Acenaphthylene		10.0	U	10.0]
120-12-7	Anthracene		10.0	U	10.0]
56-55-3	Benzo(a)anthracene		10.0	υ	10.0	}
50-32 - 8	Benzo(a)pyrene		10.0	U	10.0	}
205-99-2	Benzo(b)fluoranthene		10.0	U	10.0	
191-24-2	Benzo(g,h,i)perylene		10.0	U	10.0]
207-08-9	Benzo(k)fluoranthene		10.0	Ü	10.0]
111-91-1	Bis(2-Chloroethoxy)methane		10.0	U	10.0]
111-44-4	Bis(2-Chloroethyl)ether		1.52	J	10.0]
108-60-1	bis(2-Chloroisopropyl)ether		10.0	Ü	10.0]
117-81-7	bis(2-ethylhexyl)phthalate		10.01.06	J	10.0	U

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TE SEMINOLATUE DRIGANUS ANALYSIS DATA SHEET

Lab Name: GCAL		Sample D: SK	GW611008	
Lab Code: LA024 Case No		Contract		
Matrix: Water		SAS No :		SDG No.: 203111311
Sample witholt 1000 Units: mL		Lac Sample ID:	20311131123	Lab File ID: 2031126/S
Level: (low/med)		Date Collected:	11/14/03	Time: 1100
% Moisture: decanted: (Y/N)		Date Received:	11/15/03	
GC Column: DB-5MS-30M ID: .25	(mm)	Date Analyzed:	11/26/03	Time: 1349
Concentrated Sample Volume: 1900	(µL)	Dilution Factor:	1	Analyst RLW
Soil Aliquot Volume:	_ (µL)	Prep Method:		
Injection Volume: 2	_ (pL)	Analytical Metho	d: OLMO 4.2	
GPC Cleanup: (Y/N) N pH:		Instrument ID:	MSSV2	

CONCENTRATION UNITS: ugt.

CAS NO.	COMPOUND	RESULT	Q	RL
101-55-3	4-Bromophenyl-prenylether	10.0	U	10.0
85-68-7	Butylbenzylphthalate	*C.O	U	10.0
86-74-8	Carbazole	fC.0	υ	10.0
218-01-9	Chrysene	*C.0	υ	10.0
84-74-2	Di-n-butylphthalate	VC.00852	J	10.0
117-84-0	Di-n-octylphthalate	1C.0	U	10.0
53-70-3	Dibenz(a,h)anthracene	10.0	U	10.0
132-64-9	Dibenzofuran	10.0	บ	10.0
84-66-2	Diethylphthalate	10.0	U	10.0
131-11-3	Dimethyl-phthalate	10.0	บ	10.0
105-67-9	2,4-Dimethylphenol	10.0	บ	10.0
206-44-0	Fluoranthene	*0.0	IJ	10.0
86-73-7	Fluorene	10.0	U	10.0
118-74-1	Hexachlorobenzene	10.0	U	10.0
87-68-3	Hexachlorobutaciene	10.0	U	10.0
77-47-4	Hexachlorocyclopeniaciene	10.0	Ų	10.0
67-72-1	Hexachloroethane	10.0	U	10.0
193-39-5	indeno(1,2,3-od)pyrene	10.0	U	10.0
78-59-1	Isophorone	10.0	U	10.0
91-20-3	Naphthalene	10.0	U	10.0
100-01-6	4-Nitroaniline	25 0	U	25.0
96-95-3	Nitrobenzene	10 0	L L	10.0
100-02-7	4-Nitrophenol	25.0	U	25.0
87-86-5	Pentachiorophenol	25 0	U	25.0
85-01-8	Phenanthrene	10.0	U	10.0
108-95-2	Phenol	10.0	U	10.0
129-00-0	Pyrene	*0.0	U	10.0
621 -64- 7	N-Nitroso-di-n-propylamine	10.0	U	10.0
86-30-6	N-Mitrosodiphenylamine	10.0	U	10.0
95-48-7	o-Cresol	10.0	IJ	10.0

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SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET TENTATIVELY IDENTIFIED COMPOUNDS

Lab Name: GCAL	Sample ID: SKGW611008
Lab Code: LA024 2 Case No.:	Contract:
SAS No.: SDG No.: 203111311	Lab File ID: 2031126/S4172
Matrix: Water	Lab Sample ID: 20311131123
Sample wt/vol: Units:	Date Collected: 11/14/03 Time: 1100
Level: (low/med)	Date Received: 11/15/03
% Moisture: not dec.	Date Extracted:
GC Column: DB-5MS-30M ID: .25 (mm)	Date Analyzed: 11/26/03 Time: 1349
Concentrated Extract Volume: (µL)	Dilution Factor: 1 Analyst: RLW
Injection Volume: 1.0 (µL)	Prep Method:
GPC Cleanup: (Y/N) N pH:	Analytical Method: SW-846 8270C
	Instrument ID: MSSV2
Number TICs Found: 1	
CONCENTRATION UNITS:	
CAS NO. COMPOUND	RT EST. CONC. Q
1 . 301-02-0 9-Octadecenamide, (Z)-	14.194 47.9

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Lab Name:	GCAL	Sample D: _S	SKGW6310	X08	
Lab Code:	LA024 Case No.:	Contract:			
Matroc W	aler	SAS No :		SDG No.:	203111311
Sample wt/	vol: 1000 Units: mL	Lab Sample (C): <u>203111</u>	31127 Lab F	Te ID: 2031126/
Level: (low/	med)	Cate Collected	: 11/14/0	3 Time:	1220
% Moisture:		Date Received	11/15/0	3	
GC Column	c DB-5MS-30M iD: 25 (mm)	Date Anatyzed	: 11/26/0	3 Time	: 1514
	ed Sample Volume: 1000 (µL)			Anal	vst: RLW
	Volume: (µL)				
Injection Vo		Aralytical Met	200: <u>ULN</u>	104.2	
GPC Cleans	up: (Y/N) N pH:	Instrument ID:	MSSV2		
0010001	DATION LINETO				
CONCENT	RATION UNITS: ug/L				
CAS NO.	COMPOUND	RESULT	Q	RL	
95-95-4	2,4,5-Trichloropheno	10.0	U	10.0	7
88-06-2	2.4,6-Trichloropherio	10.0	U	10.0	7
120-83-2	2,4-Dichloropheno	10.0	υ	10.0	1
51-28-5	2,4-Dinitrophenol	25.C	U	25.0	่ ไม่\
121-14-2	2,4-Dinitrotoluene	10.0	U	10.0	
606-20-2	2,6-Dinitrotoluene	10.0	C	10.0	
91-58-7	2-Chloronaphthaiene	10.0	U	10.0	7
95-57-8	2-Chlorophenol	10.0	U	10.0	7
91-57-6	2-Methylnaphthalene	10.C	U	10.0	1
88-74-4	2-Nitroaniine	25.€	U	25.0	7
88-75-5	2-Nitrophenol	10.0	U	10.0	
91-94-1	3,3'-Dichlorobenzidine	10.0	U	10.0	7
99-09-2	3-Nitroaniine	25.0	U	25.0	7
534-52-1	2-Methyl-4,6-dinitrophenol	25.0	Ü	25.0	7
59-50-7	4-Chlaro-3-methylpneno:	10.0	IJ	10.0	7.
106-47-8	4-Chloroaniine	10.0	υ	10.0	7 R
7005-72-3	4-Chlorophenyl-pher-nether	10.0	U	10.0	7
106-44-5	4-Methylphenoi (p-Cresoi)	10.0	U	10.0	1
83-32-9	Acenaphthene	15.0	U	10.0	7
206-96-8	Acenaphthylene	10.0	U	10.0	7
120-12-7	Anthracene	10.0	U	10.0	1
56-55-3	Benzo(a)anthracene	10.0	U	10.0	1
50-32-8	Benzo(a)pyrene	10.0	U	10.0	1
205-99-2	Benzo(b)fluoranthene	10.0	U	10.0	1
191-24-2	Benzo(g,h,i)perylene	·0.0	U	10.0	7
207-08-9	Benzo(k)fluoranthene	10.0	U	10.0	1
111-91-1	Bis(2-Chloroethoxy)methane	10.0	U	10.0	1
111-44-4	Bis(2-Chloroethyr)ether	10.0	Ū	10.0	1
108-60-1	bis(2-Chloroisoprocy) ether	10.0	U	10.0	1
117-81-7	bis(2-ethylhexy)(primate	47.0000	J	10.0	tu

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

Lab Name:	GCAL		Sample iD: S	SKGW6310	80	
Lab Code:	LA024 Case No.:		Contract:			
Matrix: W	ater		SAS No.:		SDG No.:	203111311
Sample wt/v	vol: 1000 Units: mL		Lab Sample ID): 2031113	31127 Lab F	File ID: 2031126/S
Level: (low/r	med)		Date Collected	: 11/14/03	3Time	: 1220
% Moisture:	decanted: (Y/N)		Date Received	: 11/15/03	3	
GC Column	: DB-5MS-30M ID: .25	(mm)	Date Analyzed	: 11/26/03	3 Time	e: 1514
Concentrate	ed Sample Volume: 1000	(μL)	Dilution Factor	: 1	Anal	yst: RLW
	Volume:	_				
	lume: 2		Analytical Meth		•	
	up: (Y/N) N pH:		Instrument ID:		<u> </u>	
OF C Clearle	pr. (1714) 14 pri.		manument io.	MOGVZ		
CONCENTR	RATION UNITS: ug/L					
CAS NO.	COMPOUND		RESULT	Q	RL	
101-55-3	4-Bromophenyl-phenylether		10.0	-	10.0	7
85-68-7	Butylbenzylphthalate	·	10.0	U	10.0	=
86-74-8	Carbazole		10.0	U	10.0	-
218-01-9	Chrysene		10.0	U	10.0	7
84-74-2	Di-n-butylphthalate		/O.C0-801	j j	10.0	Tus
117-84-0	Di-n-octylphthalate		10.0	U	10.0	₩
53-70-3	Dibenz(a,h)anthracene		10.0	Ü	10.0	7 "
132-64-9	Dibenzofuran		10.0	U	10.0	┪
84-66-2	Diethylphthalate		10.0	Ü	10.0	-
131-11-3	Dimethyl-phthalate		10.0	U	10.0	
105-67-9	2,4-Dimethylphenol		10.0	Ū	10.0	7
206-44-0	Fluoranthene		10.0	U	10.0	┪
86-73-7	Fluorene		10.0	U	10.0	-
118-74-1	Hexachlorobenzene		10.0	Ū	10.0	-
87-68-3	Hexachlorobutadiene		10.0	U	10.0	1
77-47-4	Hexachlorocyclopentadiene		10.0	U	10.0	4
67-72-1	Hexachloroethane		10.0	U	10.0	1
193-39-5	Indeno(1,2,3-cd)pyrene		10.0	U	10.0	7
78-59-1	Isophorone		10.0	U	10.0	
91-20-3	Naphthalene		10.0	U	10.0	7
100-01-6	4-Nitroaniline		25.0	U	25.0	
98-95-3	Nitrobenzene		10.0	U	10.0	7
100-02-7	4-Nitrophenol		25.0	U	25.0	1
87-86-5	Pentachlorophenol		25.0	U	25.0	1
85-01-8	Phenanthrene		10.0	U	10.0	1
108-95-2	Phenol		10.0	Ü	10.0	1
129-00-0	Pyrene		, 10.0	U	10.0	7
621-64-7	N-Nitroso-di-n-propylamine		10.0	U	10.0	7
86-30-6	N-Nitrosodiphenylamine		10.0	U	10.0	1
95-48-7	o-Cresol		10.0		10.0	1

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SEMINOLATIVE ORGANIOS ANAURAIS DATA SHEET TENTATIVELY IDENTIFIED COMPOUNDS

Lab Name: GCAL	Sample 'D: SKGW631008
Lab Code: LA024 2 Case No.:	Contract:
SAS No.: SDG No.: 203111311	Lab File ID: 2031126/\$4175
Matrix: Water	Lab Sample ID: 20311131127
Sample wt/volt Units:	Date Collected: 11/14/03 Time: 1220
Level: (low/med)	Date Received: 11/15/03
% Moisture: not dec.	Date Extracted:
GC Column: D8-5MS-30M ID: .25 (mm)	Date Analyzed: 11/26/03 Time: 1514
Concentrated Extract Volume: (µL)	Dilution Factor: 1 Analyst: RLW
Injection Volume: 1.0 (µL)	Prep Method:
GPC Cleanup: (Y/N) N pH:	Analytical Method: SW-846 8270C
	instrument ID: MSSV2
Number TICs Found: 1	
CONCENTRATION UNITS:	
CAS NO. COMPOUND	RT EST. CONC. Q
1 . 301-02-0 9-Octadecenamide, (Z)-	14 198 48.8

18 SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

Lab Name:	GCAL		Sample ID:	SKGW2410	08	
Lab Code:	LA024 Case No.:		Contract:			
Matrix: W	/ater		SAS No.:		SDG No.:	203111311
Sample wt/	vol: 850 Units: mL		Lab Sample II	D: 2031113	31128 Lab F	ile ID: 2031126/S
Level: (low/	med)		Date Collecte	d: 11/14/03	3 Time:	1435
	: decanted: (Y/N)		Date Receive			
	n: DB-5MS-30M ID: .25					: 1610
	ed Sample Volume: 1000			-		yst: RLW
	Volume:	_				
	olume: 2		Analytical Met			
						· · · · · · · · · · · · · · · · · · ·
GPC Clean	up: (Y/N) N pH:		Instrument ID:	M55V2		
CONCENT	RATION UNITS: ug/L ,					
CAS NO.	COMPOUND		RESULT	Q	RL	
95-95-4	2,4,5-Trichlorophenol		11.8	U	11.8	٦
88-06-2	2,4,6-Trichlorophenol		11.8	U	11.8	7
120-83-2	2,4-Dichlorophenol		11.8	U	11.8	1
51-28-5	2,4-Dinitrophenol		29.4	Ü	29.4	√u'>
121-14-2	2,4-Dinitrotoluene		11.8	U	11.8	7
606-20-2	2,6-Dinitrotoluene		11.8	U	11.8	1
91-58-7	2-Chloronaphthalene	* * * * * * * * * * * * * * * * * * * *	11.8	U	11.8	
95-57-8	2-Chlorophenol		11.8	U	11.8	
91-57-6	2-Methylnaphthalene		11.8	U	11.8	=
88-74-4	2-Nitroaniline		29.4	U	29.4	7
88-75-5	2-Nitrophenol		11.8	U	11.8	7
91-94-1	3,3'-Dichlorobenzidine		11.8	U	11.8	1
99-09-2	3-Nitroaniline		29.4	U	29.4	7
534-52-1	2-Methyl-4,6-dinitrophenol		29.4	U	29.4	7
59-50-7	4-Chioro-3-methylphenol		11.8	Ü	11.8]
106-47-8	4-Chloroaniline		11.8	U	11.8] R
7005-72-3	4-Chlorophenyl-phenylether		11.8	U	11.8] '
106-44-5	4-Methylphenol (p-Cresol)		11.8	U	11.8]
83-32-9	Acenaphthene		11.8	U	11.8	
208-96-8	Acenaphthylene		11.8	U	11.8]
120-12-7	Anthracene		11.8	Ü	11.8	
56-55-3	Benzo(a)anthracene		11.8	U	11.8]
50-32-8	Benzo(a)pyrene		11.8	U	11.8]
205-99-2	Benzo(b)fluoranthene		11.8	U	11.8	
191-24-2	Benzo(g,h,i)perylene		11.8	U	11.8]
207-08-9	Benzo(k)fluoranthene		11.8	U	11.8	
111-91-1	Bis(2-Chloroethoxy)methane		11.8	U	11.8	
111-44-4	Bis(2-Chloroethyl)ether		11.8	U	11.8	_
108-60-1	bis(2-Chloroisopropyl)ether		11.8	U	11.8]
117-81-7	bis(2-ethylhexyl)phthalate		11.8 1.05	J	11.8] U

1113/04

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SEM FOLAT LE ORGANIOS ANALYS S DATA SHEET

Lab Name: GCAL	Sample D SKGW241908
Lab Code: LA024 Case No.:	Contract
Matrix: Water	SAS No.: SDG No.: 203111311
Sample w/vol: 850 Units mt.	Lat Sample ID: 20311131128 Lab File ID: 2031126/S
Level: (lowfried)	Date Collected: 11/14/03 Time: 1435
% Moisture: decanted: (Y/N)	Date Received: 11/15/03
GC Column: D8-5MS-30M ID: 25 (mr	m) Date Analyzed: 11/26/03 Time: 1610
Concentrated Sample Volume: 1000 (µl	L) Dilution Factor: 1 Analyst: RLW
Soil Aliquot Volume: (µl	L) Prep Method:
Injection Volume: 2 (µt	L) Analytical Method: OLMO 4.2
GPC Cleanup: (Y/N) N pH:	Instrument ID: MSSV2

CONCENTRATION UNITS: ugt

101-55-3	CAS NO.	COMPOUND	RESULT	Q	RL	
\$6-74-8 Carbazole 11.8 U 11.8 218-01-9 Chrysene 11.8 U 11.8 84-74-2 Di-n-butylphthalate (1,2,0-e00 U 11.8 117-84-0 Di-n-octylphthalate 11.8 U 11.8 137-64-9 Dibenzoluran 11.8 U 11.8 84-66-2 Dietrylphthalate 11.8 U 11.8 131-11-3 Dimetryl-phthalate 11.8 U 11.8 166-79-7 Fluorenthene 11.8 U 11.8 167-79 Reachiorobenzene 11.8 U 11.8 167-79 Hexachiorobenzene 11.8 U 11.8 17-4-1 Hexachiorobenzene 11.8 U 11.8 17-4-1 Hexachiorobenzene 11.8 U 11.8 17-4-4 Hexachiorobenzene 11.8 U 11.8 17-39-5 Indeno(1,2,3-cd)pyrene 11.8 U 11.8 193-39-5 Indeno(1,2,3-cd)pyrene 11.8 U 11.8 190-01-6 4-Nitroaniline 29-4 U 29-4 198-95-3 Nitrobenzene 11.8 U 11.8 100-02-7 4-Nitrophenol 29-4 U 29-4 100-02-7 4-Nitrophenol 29-4 U 29-4 100-02-7 4-Nitrophenol 29-4 U 29-4 100-05-2 Phenol 11.8 U 11.8 108-95-2 Phenol 11.8 U 11.8 108-95-2 Phenol 11.8 U 11.8 108-90-0 Pyrene 11.8 U 11.8	101-55-3	4-Bromophenyl-phenylether	11.6	Ü	11.8	٦
218-01-9 Chrysene	85-68-7	Butylbenzylphthalate	11.8	U	11.8	7
84-74-2 Di-n-butylphthalate	86-74-8	Carbazole	11.8	U	11.8	7
117-84-0 Di-n-octylphthalate 11.8 U 11.8 53-70-3 Dibenz(a,h)anthracene 11.8 U 11.8 132-64-9 Dibenzofuran 11.8 U 11.8 84-66-2 Diethylphthalate 11.8 U 11.8 131-11-3 Dimethyl-phthalate 11.8 U 11.8 105-67-9 2,4-Dimethylpheno: 11.8 U 11.8 206-44-0 Fluoranthene 11.8 U 11.8 86-73-7 Fluoranthene 11.8 U 11.8 118-74-1 Hexachlorobenzene 11.8 U 11.8 87-68-3 Hexachlorobutadiene 11.8 U 11.8 87-72-1 Hexachlorocyclopentaciene 11.8 U 11.8 87-72-1 Hexachlorocyclopentaciene 11.8 U 11.8 193-39-5 Indeno(1,2,3-cd)pyrene 11.8 U 11.8 193-39-5 Indeno(1,2,3-cd)pyrene 11.8 U 11.8 190-01-	218-01-9	Chrysene	1	U	11.8	7
53.70-3 Dibenz(a,h)anthracene 11.8 U 11.8 132-64-9 Dibenzofuran 11.8 U 11.8 84-66-2 Diethylphthalate 11.8 U 11.8 131-11-3 Dimethyl-phthalate 11.8 U 11.8 105-67-9 2,4-Dimethylpheno 11.8 U 11.8 206-44-0 Fluoranthene 11.8 U 11.8 206-47-7 Fluorene 11.8 U 11.8 118-74-1 Hexachlorobenzene 11.8 U 11.8 118-74-2 Hexachlorocyclopentadiere 11.8 U 11.8 67-72-1 Hexachlorocyclopentadiere 11.8 U 11.8 193-39-5 Indeno(1.2,3-cd)pyrene 11.8 U 11.8 193-39-5 Indeno(1.2,3-cd)pyrene 11.8 U 11.8 193-39-5 Indeno(1.2,3-cd)pyrene 11.8 U 11.8 190-01-6 4-Nitroaniline 29.4 U 29.4 98-95-3 <td>84-74-2</td> <td>Di-n-butylphthalate</td> <td>11.2-0.606</td> <td>J</td> <td>11.8</td> <td>٦u</td>	84-74-2	Di-n-butylphthalate	11.2-0.606	J	11.8	٦u
132-64-9 Diberzofuran	117-84-0	Di-n-octylphthalate		U	11.8	٦٠
84-66-2 Diethylphthalate 11.8 U 11.8 131-11-3 Dimethyl-phthalate 11.8 U 11.8 105-67-9 2,4-Dimethylphenol 11.8 U 11.8 206-44-0 Fluoranthene 11.8 U 11.8 206-44-0 Fluoranthene 11.8 U 11.8 206-47-7 Fluoranthene 11.8 U 11.8 118-74-1 Hexachloroberace 11.8 U 11.8 87-68-3 Hexachlorocyclopentadiene 11.8 U 11.8 77-47-4 Hexachlorocyclopentadiene 11.8 U 11.8 193-39-5 Indeno(1,2,3-cd)pyrene 11.8 U 11.8 190-03 Naphthalene 11.8 U 11.8 100-01-6 <td>53-70-3</td> <td>Dibenz(a,h)anthracene</td> <td>**.8</td> <td>U</td> <td>11.8</td> <td>7</td>	53-70-3	Dibenz(a,h)anthracene	**.8	U	11.8	7
131-11-3 Dimethyl-phthelate 11.8 U 11.8 105-67-9 2,4-Dimethylpheno 11.8 U 11.8 206-44-0 Fluoranthene 11.8 U 11.8 86-73-7 Fluorene 11.8 U 11.8 118-74-1 Hexachlorobenzene 11.8 U 11.8 87-68-3 Hexachlorobutadiene 11.8 U 11.8 77-47-4 Hexachlorocyclopentadiene 11.8 U 11.8 67-72-1 Hexachlorocyclopentadiene 11.8 U 11.8 193-39-5 Indeno(1,2,3-cd)pyrene 11.8 U 11.8 193-39-5 Indeno(1,2,3-cd)pyrene 11.8 U 11.8 91-20-3 Naphthalene 11.8 U 11.8 91-20-3 Naphthalene 11.8 U 11.8 100-01-6 4-Nitrosniline 29.4 U 29.4 96-95-3 Nikrobenzene 11.8 U 11.8 100-02-7 4-Nitro	132-64-9	Dibenzoluran	11.8	U	11.8	
105-67-9 2,4-Dimethylphenos 11,8 U 11.8 206-44-0 Fluoranthene 11,8 U 11.8 86-73-7 Fluorene 11,8 U 11.8 118-74-1 Hexachlorobenzene 11,8 U 11.8 87-68-3 Hexachlorobutaciere 11,8 U 11,8 77-47-4 Hexachlorocyclopentaciere 11,8 U 11,8 67-72-1 Hexachlorocyclopentaciere 11,8 U 11,8 193-39-5 Indeno(1,2,3-cd)pyrene 11,8 U 11,8 193-39-5 Indeno(1,2,3-cd)pyrene 11,8 U 11,8 91-20-3 Naphthalene 11,8 U 11,8 91-20-3 Naphthalene 11,8 U 11,8 100-01-6 4-Nitroaniline 29,4 U 29,4 98-95-3 Nitrobenzene 11,8 U 11,8 100-02-7 4-Nitrophenol 29,4 U 29,4 85-01-8 Phenol	84-66-2	Diethylphthalate	11.8	Ü	11.8	
206-44-0 Fluoranthene 11.8 U 11.8 86-73-7 Fluorene 11.8 U 11.8 118-74-1 Hexachlorobenzene 11.8 U 11.8 87-68-3 Hexachlorobutadiene 11.8 U 11.8 77-47-4 Hexachlorocyclopentadiene 11.8 U 11.8 67-72-1 Hexachloroethane 11.8 U 11.8 193-39-5 Indeno(1,2,3-cd)pyrene 11.8 U 11.8 193-39-5 Isophorone 11.8 U 11.8 91-20-3 Naphthalene 11.8 U 11.8 100-01-6 4-Nitroantine 29.4 U 29.4 98-95-3 Nitrobenzene 11.8 U 11.8 100-02-7 4-Nitrophenol 29.4 U 29.4 87-86-5 Pentachlorophenol 29.4 U 29.4 85-01-8 Phenol 11.8 U 11.8 106-95-2 Phenol 11.8	131-11-3	Dimethyl-phthalate	11.8	IJ	11.8	
86-73-7 Fluorene 11.8 U 11.8 118-74-1 Hexachlorobenzene 11.8 U 11.8 87-68-3 Hexachlorobutadiene 11.8 U 11.8 77-47-4 Hexachlorocyclopentadiene 11.8 U 11.8 67-72-1 Hexachloroethane 11.8 U 11.8 193-39-5 Indeno(1,2,3-cd)pyrene 11.8 U 11.8 78-59-1 Isophorone 11.8 U 11.8 91-20-3 Naphthalene 11.8 U 11.8 100-01-6 4-Nitroaniline 29.4 U 29.4 98-95-3 Nitrobenzene 11.8 U 11.8 100-02-7 4-Nitrophenol 29.4 U 29.4 87-86-5 Pentachlorophenol 29.4 U 29.4 88-01-8 Phenol 11.8 U 11.8 108-95-2 Phenol 11.8 U 11.8 108-90-0 Pyrene 11.8	105-67-9	2,4-Dimethylphenoi	11.8	Ŋ	11.8	
118-74-1 Hexachlorobenzene 11.8 U 11.8 87-68-3 Hexachlorobutadiene 11.8 U 11.8 77-47-4 Hexachlorocyclopentadiene 11.8 U 11.8 67-72-1 Hexachlorocethane 11.8 U 11.8 193-39-5 Indeno(1,2,3-cd)pyrene 11.8 U 11.8 78-59-1 Isophorone 11.8 U 11.8 91-20-3 Naphthalene 11.8 U 11.8 100-01-6 4-Nitroaniline 29.4 U 29.4 98-95-3 Nitrobenzene 11.8 U 11.8 100-02-7 4-Nitrophenol 29.4 U 29.4 87-86-5 Pentachlorophenol 29.4 U 29.4 85-01-8 Phenanthrene 11.8 U 11.8 106-95-2 Phenol 11.8 U 11.8 129-00-0 Pyrene 11.8 U 11.8 621-64-7 N-Nitroso-di-n-propy: amine 11.8 U 11.8 65-30-6 N-Nitrosodiphenylamine	206-44-0	Fluoranthene	11.8	U	11.8	
87-68-3 Hexachlorobutadiene 11.8 U 11.8 77-47-4 Hexachlorocyclopentadiene 11.8 U 11.8 67-72-1 Hexachloroethane 11.8 U 11.8 193-39-5 Indeno(1,2,3-cd)pyrene 11.8 U 11.8 78-59-1 Isophorone 11.8 U 11.8 91-20-3 Naphihalene 11.8 U 11.8 100-01-6 4-Nitroaniline 29.4 U 29.4 98-95-3 Nikroberzene 11.8 U 11.8 100-02-7 4-Nitrophenol 29.4 U 29.4 87-86-5 Pentachlorophenol 29.4 U 29.4 85-01-8 Phenanthrene 11.8 U 11.8 106-95-2 Phenol 11.8 U 11.8 129-00-0 Pyrene 11.8 U 11.8 621-64-7 N-Nitroso-di-n-propy:amine 11.8 U 11.8 85-30-6 N-Nitrosodiphenylamine	86-73-7	Fluorene	*1.8	U	11.8	
77-47-4 Hexachlorocyclopentadiene 11.8 U 11.8 67-72-1 Hexachloroethane 11.8 U 11.8 193-39-5 Indeno(1,2,3-cd)pyrene 11.8 U 11.8 78-59-1 Isophorone 11.8 U 11.8 91-20-3 Naphthalene 11.8 U 11.8 100-01-6 4-Nitroaniline 29.4 U 29.4 98-95-3 Nitrobenzene 11.8 U 11.8 100-02-7 4-Nitrophenol 29.4 U 29.4 87-86-5 Pentachlorophenol 29.4 U 29.4 85-01-8 Phenanthrene 11.8 U 11.8 106-95-2 Phenol 11.8 U 11.8 129-00-0 Pyrene 11.8 U 11.8 621-64-7 N-Nitroso-di-n-propy:amine 11.8 U 11.8 65-30-6 N-Nitrosodiphenylamine 11.8 U 11.8	118-74-1	Hexachlorobenzene	11.8	Ü	11.8	
67-72-1 Hexachloroethane 11.8 U 11.8 193-39-5 Indeno(1,2,3-cd)pyrene 11.8 U 11.8 78-59-1 Isophorone 11.8 U 11.8 91-20-3 Naphthalene 11.8 U 11.8 100-01-6 4-Nitroaniline 29.4 U 29.4 98-95-3 Nitrobenzene 11.8 U 11.8 100-02-7 4-Nitrophenol 29.4 U 29.4 87-86-5 Pentachlorophenol 29.4 U 29.4 85-01-8 Phenanthrene 11.8 U 11.8 106-95-2 Phenol 11.8 U 11.8 129-00-0 Pyrene 11.6 U 11.8 621-64-7 N-Nitroso-di-n-propy:amine 11.8 U 11.8 86-30-6 N-Nitrosodiphenylamine 11.8 U 11.8	87-68-3	Hexachiorobutadiene	11.8	U	11.8	
193-39-5 Indeno(1,2,3-cd)pyrene 11.8 U 11.8 78-59-1 Isophorone 11.8 U 11.8 91-20-3 Naphthalene 11.8 U 11.8 100-01-6 I-Nitroaniline 29.4 U 29.4 98-95-3 Nitrobenzene 11.8 U 11.8 100-02-7 I-Nitrophenol 29.4 U 29.4 87-86-5 Pentachlorophenol 29.4 U 29.4 85-01-8 Phenanthrene 11.8 U 11.8 108-95-2 Phenol 11.8 U 11.8 129-00-0 Pyrene 11.6 U 11.8 621-64-7 N-Nitroso-di-n-propy:amine 11.8 U 11.8 85-30-6 N-Nitrosodiphenylamine 11.8 U 11.8	77-47-4	Hexachlorocyclopentadiene	11.8	U	11.8	_
78-59-1 Isophorone 11.8 U 11.8 91-20-3 Naphthalene 11.8 U 11.8 100-01-6 4-Nitroaniline 29.4 U 29.4 98-95-3 Nitroberzene 11.8 U 11.8 100-02-7 4-Nitrophenol 29.4 U 29.4 87-86-5 Pentachlorophenol 29.4 U 29.4 85-01-8 Phenarithrene 11.8 U 11.8 108-95-2 Phenol 11.8 U 11.8 129-00-0 Pyrene 11.6 U 11.8 621-64-7 N-Nitroso-di-n-propy:amine 11.8 U 11.8 85-30-6 N-Nitrosodiphenylamine 11.8 U 11.8	67-72-1	Hexachloroethane	11.8	U	11.8	_
91-20-3 Naphthalene 11.8 U 11.8 100-01-6 4-Nitroaniline 29.4 U 29.4 98-95-3 Nitrobenzene 11.8 U 11.8 100-02-7 4-Nitrophenol 29.4 U 29.4 87-86-5 Pentachlorophenol 29.4 U 29.4 85-01-8 Phenanthrene 11.8 U 11.8 108-95-2 Phenol 11.8 U 11.8 129-00-0 Pyrene 11.6 U 11.8 621-64-7 N-Nitroso-di-n-propy:amine 11.8 U 11.8 86-30-6 N-Nitroso-di-n-propy:amine 11.8 U 11.8	193-39-5	Indeno(1,2,3-cd)pyrene	11.8	U	11.8	_
100-01-6 IA-Nitroaniline 29.4 U 29.4 98-95-3 Nitroberzene 11.8 U 11.8 100-02-7 III. Virophenol 29.4 U 29.4 87-86-5 Pentachlorophenol 29.4 U 29.4 85-01-8 Phenanthrene 11.8 U 11.8 106-95-2 Phenol 11.8 U 11.8 129-00-0 Pyrene 11.6 U 11.8 621-64-7 N-Nitroso-di-n-propy:amine 11.8 U 11.8 86-30-6 N-Nitrosodiphenylamine 11.8 U 11.8	78-59-1	Isophorone	11.8	U	11.8	
98-95-3 Nitrobenzene 11.8 U 11.8 100-02-7 4-Nitrophenol 29.4 U 29.4 87-86-5 Pentachlorophenol 29.4 U 29.4 85-01-8 Phenanthrene 11.8 U 11.8 106-95-2 Phenol 11.8 U 11.8 129-00-0 Pyrene 11.6 U 11.8 621-64-7 N-Nitroso-di-n-propy:amine 11.8 U 11.8 06-30-6 N-Nitroso-diphenylamine 11.8 U 11.8	91-20-3	Naphthalene	11.8	U	11.8	
100-02-7 4-Nitrophenol 29.4 U 29.4 87-86-5 Pentachlorophenol 29.4 U 29.4 85-01-8 Phenanthrene 11.8 U 11.8 106-95-2 Phenol 11.8 U 11.8 129-00-0 Pyrene 11.6 U 11.8 621-64-7 N-Nitroso-di-n-propy:amine 11.8 U 11.8 86-30-6 N-Nitrosodiphenylamine 11.8 U 11.8	100-01-6	4-Nitroanitine	29 4	Ų	29.4	
87-86-5 Pertachlorophenol 29.4 U 29.4 85-01-8 Phenarithrene 11.8 U 11.8 108-95-2 Phenol 11.8 U 11.8 129-00-0 Pyrene 11.6 U 11.8 621-64-7 N-Nitroso-di-n-propy:amine 11.8 U 11.8 86-30-6 N-Nitrosodiphenylamine 11.8 U 11.8	98-95-3	Nitrobenzene	11.8	U	11.8	
85-01-8 Phenanthrene 11.8 U 11.8 108-95-2 Phenol 11.8 U 11.8 129-00-0 Pyrene 11.6 U 11.8 621-64-7 N-Nitroso-di-n-propy:amine 11.8 U 11.8 86-30-6 N-Nitrosodiphenylamine 11.8 U 11.8	100-02-7	4-Nitrophenol	29.4	IJ	29.4	_
108-95-2 Phenol 11.8 U 11.8 129-00-0 Pyrene 11.6 U 11.8 621-64-7 N-Nitroso-di-n-propy:amine 11.8 U 11.8 86-30-6 N-Nitrosodiphenylamine 11.8 U 11.8	87-86-5	Pentachlorophenol	29.4	υ	29.4	_
129-00-0 Pyrene *1.6 U 11.8 621-64-7 N-Nitroso-di-n-propy:amine 11.8 U 11.8 86-30-6 N-Nitrosodiphenylamine 11.8 U 11.8	85-01-8	Phenanthrene	118	υ	11.8	_
621-64-7 N-Nitroso-di-n-propy:amine 11.8 U 11.8 96-30-6 N-Nitrosodiphenylamine 11.8 U 11.8	108-95-2	Phenol	11.8	U	11.8	
86-30-6 N-Nitrosodiphenylamine 11.8 U 11.8	129-00-0	Pyrene	11.6	U	11.8	_
	521-64-7	N-Nitroso-di-n-propy:amine	11.8	U	11.8	_
75-48-7 o-Cresoi :18 1J 11.8	36-30-6	N-Nitrosodiphenylamine	11.8	U	11.8	-
11.0	95-48-7	o-Cresci	118	υ	11.8	_

113/04 pr-000370

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET TENTATIVELY IDENTIFIED COMPOUNDS

Lab Name: GCAL	Sample ID: SKGW241008
Lab Code: LA024 2 Case No.:	Contract:
SAS No.: SDG No.: 203111311	Lab File ID: 2031126/S4177
Matrix: Water	Lab Sample ID: 20311131128
Sample wt/vol: Units:	Date Collected: 11/14/03 Time: 1435
Level: (low/med)	Date Received: 11/15/03
% Moisture: not dec.	Date Extracted:
GC Column: DB-5MS-30M ID: .25 (mm)	Date Analyzed: 11/26/03 Time: 1610
Concentrated Extract Volume: (µL)	Dilution Factor: 1 Analyst: RLW
Injection Volume: 1.0 (μL)	Prep Method:
GPC Cleanup: (Y/N) N pH:	Analytical Method: SW-846 8270C
	Instrument ID: MSSV2
Number TICs Found: 2	
CONCENTRATION UNITS:	
CAS NO. COMPOUND	RT EST. CONC. Q
1 . 54789-40-1 Heptanamide, 4-ethyl-5-methyl-	12.581 15.3
2 . 301-02-0 9-Octadecenamide, (Z)-	14.185 43.3

SEMBYQUATLE ORGAN IS ANALYSIS DATA SHEET

Lab Name: GCAL	Sample D: S	KGW07R100	8	
Lab Code: LA024 Case No :	Contract			
Matrix: Water			SDG No.: _20	03111311
Sample wt/vol: 1000 Units: mL	Lat Sample ID:	203111311	101	
Level: (low/med)	Date Collected:	11/12/03	Time: 14	453
% Moisture: decanted: (Y/N)	Date Received:	11/13/03		
GC Column: RTX-50-30M ID: .53 (mm)	Date Analyzed:	11/29/03	Time: 18	350
			Analyst	
Concentrated Extract Volume: (µL)				<u> </u>
Injection Volume: (µL)				
GPC Cleanup: (Y/N) N pH:	Analytical Meth	od: OLMO 4	1.2	
	Sulfur Cleanup:	(Y/N) N	Instrument ID:	GCS11A
	Lab File ID: 20	311 29/ SV110	01	
CONCENTRATION UNITS: ug/l.				
CAS NO. COMPOUND	RESULT	Q	RL	
72-54-8 4.4'-000	0.100	U	0.100	
72-55-9 4,4'-DOE	0.100	ប	0.100	
50-29-3 4,4'-DDT	0.100	U	0.100	
309-00-2 Aldrin	0.050	U	0.050	
12674-11-2 Aroclor-1016	1 00	U	1.00	
11104-28-2 Aroctor-1221	2 00	U	2.00	
11141-16-5 Arocior-1232	1.00	U	1.00	
53469-21-9 Arocior-1242	1.00	U	1.00	
12672-29-6 Aroctor-1248	1 00	Ü	1.00	
11097-69-1 Aroclor-1254	1.00	U	1.00	
11096-82-5 Aroclor-1260	1.00	U .	1.00	
60-57-1 Dieldrin	0.100	IJ	0.100	
959-98-8 Endosulfan I	0.050	U	0.050	
33213-65-9 Endosulfan II	J. 100	U	0.100	
1031-07-8 Endosulfan suifate	0.100	U	0.100	
72-20-8 Endrin	0.100	Ü	0.100	
7421-93-4 Endrin aldehyde	0.100	ΰ	0.100	
53494-70-5 Endrin ketone	0.100	U	0.100	
76-44-8 Heptachlor	0.050	U	0.050	
1024-57-3 Heptachlor epoxide	0.050	U	0.050	
72-43-5 Methoxychior	2 500	U	0.500	
8001-35-2 Toxaphene	5.90	 -	5.00	
319-84-6 alpha-BHC	3.050	U	0.050	
5103-71-9 alpha-Chlordane	0.050	<u> </u>	0.050	
319-85-7 beta-BHC	3.050			
<u></u>			0.050	
319-86-8 deta-BHC	0.050	<u> </u>	0.050	
58-89-9 gamma-BHC (Lindarie	2.050	<u>U</u>	0.050	

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

Lab Name: GCAL	Sample ID: SKGW06R1008
Lab Code: LA024 Case No.:	Contract:
Matrix: Water	SAS No.: SDG No.: 203111311
Sample wt/vol: 1000 Units: mL	Lab Sample ID: 20311131102
Level: (low/med)	Date Collected: 11/12/03 Time: 1525
% Moisture: decanted: (Y/N)	Date Received: 11/13/03
GC Column: RTX-50-30M ID: .53 (mm)	Date Analyzed: 11/29/03 Time: 1918
Concentrated Extract Volume: (µL)	Dilution Factor: 1 Analyst: DLB
Injection Volume: (µL)	Prep Method:
	Analytical Method: OLMO 4.2
GPC Cleanup: (Y/N) N pH:	
	Sulfur Cleanup: (Y/N) N Instrument ID: GCS11A
CONCENTRATION UNITS:	Lab File ID: 2031129/SV1102
CONCENTRATION UNITS: ug/L	
CAS NO. COMPOUND	RESULT Q RL
72-54-8 4,4'-DDD	0.100 U 0.100
72-55-9 4,4'-DDE	0.100 U 0.100
50-29-3 4,4'-DDT	0.100 U 0.100
309-00-2 Aldrin	0.050 U 0.050
12674-11-2 Aroclor-1016	1.00 U 1.00
11104-28-2 Aroclor-1221	2.00 U 2.00
11141-16-5 Aroclor-1232	1.00 U 1.00
53469-21-9 Aroclor-1242	1.00 U 1.00
12672-29-6 Aroclor-1248	1.00 U 1.00
11097-69-1 Aroclor-1254	1.00 U 1.00
11096-82-5 Aroclor-1260	1.00 U 1.00
60-57-1 Dieldrin	0.100 U 0.100
959-98-8 Endosulfan I	0.050 U 0.050
33213-65-9 Endosulfan II	0.100 U 0.100
1031-07-8 Endosulfan sulfate	0.100 U 0.100
72-20-8 Endrin	0.100 U 0.100
7421-93-4 Endrin aldehyde	0.100 U 0.100
53494-70-5 Endrin ketone	0.100 U 0.100
76-44-8 Heptachlor	0.050 U 0.050
1024-57-3 Heptachior epoxide	0.050 U 0.050
72-43-5 Methoxychlor	0.500 U 0.500
8001-35-2 Toxaphene	5.00 U 5.00
319-84-6 alpha-BHC	0.050 U 0.050
5103-71-9 alpha-Chlordane	0.050 U 0.050
319-85-7 beta-BHC	0.050 U 0.050
319-86-8 delta-BHC	0.050 U 0.050
58-89-9 gamma-BHC (Lindane)	0.050 U 0.050
5103-74-2 gamma-Chlordane	0.050 U 0.050

10 SEMINICLATILE ORGANICS ANALNO E DAT**A SHEE**T

Lac Name: GCAL	Sample D. SK GW591008
Lab Code: LA024 Case No.:	Contract:
Matrix: Water	SAS No: SDG No.: 203111311
Sample wi/vob 1000 Units mi	
Level: (low/med)	Date Collected: 11/12/03 Time: 1105
% Moisture: decarted: (Y/N)	Date Received: 11/13/03
GC Column: RTX-50-30M D: 53 (mm)	Date Analyzed: 11/29/03 Time: 1946
Concentrated Extract Volume: (µL)	Dilution Factor: 1 Analyst: DLB
Injection Volume: (µL)	Prep Method:
GPC Cleanup: (Y/N) N pHt	
	Sulfur Cleanup: (Y/N) N Instrument ID: GCS11A
CONCENTRATION UNITS: ug/L	Lab File ID: 2031129/SV1102
CAS NO. COMPOUND	RESULT Q RL
72-54-8 4,4'-00D	3.100 U 0.100
72-55-9 4,4'-DOE	0.100 U 0.100
50-29-3 4,4'-DOT	C.10C U 0.100
309-00-2 Aldrin	0.050 U 0.050
12674-11-2 Aroclor-1016	1.00 U 1.00
11104-28-2 Aroclor-1221	2.00 U 2.00
11141-16-5 Aroclor-1232	1.00 U 1.00
53469-21-9 Aroclor-1242	1.00 U 1.00
12672-29-6 Aroclor-1248	1 0C U 1.00
11097-69-1 Aroclor-1254	1.00 U 1.00
11096-82-5 Aroclor-1260	1.00 U 1.00
60-57-1 Dieldrin	0.100 U 0.100
959-98-8 Endosulfan I	0.050 U 0.050
33213-65-9 Endosuffan II	0 100 U 0.100
1031-07-8 Endosulfan suifate	0.100 U 0.100
72-20-8 Endrin	0.100 U 0.100
7421-93-4 Endrin aldehyde	0.100 U 0.100
53494-70-5 Endrin kelone	0.100 U 0.100
76-44-8 Heptachlor	C.050 U 0.050
1024-57-3 Heptachior epoxide	0.050 U 0.050
72-43-5 Methoxychlor	0 500 U 0.500
8001-35-2 Toxaphene	5.00 U 5.00
319-84-6 alpha-BHC	0.050 U 0.050
5103-71-9 alpha-Chlordane	0.050 U 0.050
319-85-7 beta-8HC	0.050 U 0.050
319-86-8 delta-BHC	0.050 U 0.050
58-89-9 gamma-BHC (Lindane)	0 050 U 0.050
5103-74-2 gamma-Chlordane	0 050 U 0.050

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

Lab Name: GCAL	Sample ID: SKGW601008	
Lab Code: LA024 Case No.:	Contract:	
Matrix: Water	SAS No.: SDG No.: 203111311	
Sample wt/vol: 1000 Units: mL	Lab Sample ID: 20311131104	
Level: (low/med)	Date Collected: 11/12/03 Time: 1128	
% Moisture: decanted: (Y/N)	Date Received: 11/13/03	
•		
GC Column: RTX-50-30M ID: .53 (mm)		
Concentrated Extract Volume: (µL)	Dilution Factor: 1 Analyst: DLB	
Injection Volume: (µL)	Prep Method:	
GPC Cleanup: (Y/N) N pH:	Analytical Method: OLMO 4.2	
	Sulfur Cleanup: (Y/N) N Instrument ID: GCS11A	
CONCENTRATION UNITS: ug/L	Lab File ID: 2031129/SV1102	
CAS NO. COMPOUND	RESULT Q RL	
<u>, </u>		
72-54-8 4,4'-DDD 72-55-9 4,4'-DDE	0.100 U 0.100 0.100 U 0.100	
50-29-3 4,4'-DDT	0.100 U 0.100	
309-00-2 Aldrin	0.050 U 0.050	
12674-11-2 Aroclor-1016	1.00 U 1.00	
11104-28-2 Aroclor-1221	2.00 U 2.00	
11141-16-5 Aroclor-1232	1.00 U 1.00	
53469-21-9 Aroclor-1242	1.00 U 1.00	
12672-29-6 Aroclor-1248	1.00 U 1.00	
11097-69-1 Aroclor-1254	1.00 U 1.00	
11096-82-5 Aroclor-1260	1.00 U 1.00	
60-57-1 Dieldrin	0.100 U 0.100	
959-98-8 Endosulfan I	0.050 U 0.050	
33213-65-9 Endosulfan II	0.100 U 0.100	
1031-07-8 Endosulfan sulfate	0.100 U 0.100	
72-20-8 Endrin	0.100 U 0.100	
7421-93-4 Endrin aldehyde	0.100 U 0.100	
53494-70-5 Endrin ketone	0.100 U 0.100	
76-44-8 Heptachlor	0.050 U 0.050	
1024-57-3 Heptachlor epoxide	0.050 U 0.050	
72-43-5 Methoxychlor	0.500 U 0.500	
8001-35-2 Toxaphene	5.00 U 5.00	
319-84-6 alpha-BHC	0.050 U 0.050	
5103-71-9 alpha-Chlordane	0.050 U 0.050	
319-85-7 beta-BHC	0.050 U 0.050	
319-86-8 delta-BHC	0.050 U 0.050	
58-89-9 gamma-BHC (Lindane)	0.050 U 0.050	
5103-74-2 gamma-Chlordane	0.050 U 0.050	

SEM CLATILE CROANCS ANALMS SIDATA SHEET

Lab Name: GCAL	Sample Dr. SKGW62A1008	
Lab Code: LA024 Case No.:	Contract:	
Matrix: Water	S45 No: SDG No.: 203111311	
Sample w/vol: 1000 Units: mt.	_ар Sатріе і Э : 20311131105	
Level: (low/med)	Date Collected: 11/12/03 Time: 1201	
% Moisture: decanted: (Y/N)	Date Received: 11/13/03	
GC Column: RTX-50-30M 3D: .53 (mm)	Date Anaryzed: 11/29/03 Time: 2042	
Concentrated Extract Volume: (µL)		
Injection Volume: (µL)	**	
GPC Cleanup: (Y/N) N pH:	Analytical Method: OLMO 4.2	
		
	Sulfur Cleanup: (Y/N) N Instrument ID: GCS11A	
CONCENTRATION UNITS: ug/L	Lab File ID: 2031129/SV1102	
CAC NO COMPOUND	DECLUT O DI	
CAS NO. COMPOUND	RESULT Q RL	
72-54-8 4,4-000	5 :00 U 0.100	
72-55-9 4,4'-DDE	0.100 U 0.100	
50-29-3 4,4'-OOT	9.100 U 0.100	
309-00-2 Aldrin	0.050 U 0.050	
12674-11-2 Aroclor-1016	1.30 U 1.00	
11104-28-2 Arocior-1221	2.00 U 2.00	
11141-16-5 Arodor-1232	1.00 U 1.00	
53469-21-9 Aroclor-1242	1.00 U 1.00	
12672-29-6 Arodor-1248	1.00 U 1.00	
11097-69-1 Arodor-1254	1.00 U 1.00	
11096-82-5 Arodor-1260	1.00 U 1.00	
60-57-1 Dieldrin	0.100 U 0.100	
959-98-8 Endosulfan I	0.050 U 0.050	
33213-65-9 Endosulfan II	C.100 U 0.100	
1031-07-8 Endosulfan sulfate	0.100 U 0.100	
72-20-8 Endrin	0.100 U 0.100	
7421-93-4 Endrin aldehyde	0.100 U 0.100	
53494-70-5 Endrin ketone	3.100 U 0.100	
	······································	
76-44-8 Heptachlor		
1024-57-3 Heptachlor epoxide	3.050 U 0.050	
72-43-5 Methoxychiar	0.500 U 0.500	
8001-35-2 Toxaphene	5 00 U 5.00	
319-84-6 alpha-BHC	0.050 U 0.050	
5103-71-9 alpha-Chlordane	0.050 U 0.050	
319-85-7 beta-BHC	0.050 U 0.050	
319-86-8 delta-BHC	0.050 U 0.050	
58-89-9 gamma-BHC (Lindane)	0.050 U 0.050	
5103-74-2 comma Chlordane	3 753 11 0.060	

1D SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

Lab Name: GCAL	Sample ID: SKGW641008
Lab Code: LA024 Case No.:	Contract:
Matrix: Water	SAS No.: SDG No.: 203111311
Sample wt/vol: 1000 Units: mL	Lab Sample ID: 20311131106
Levei: (low/med)	Date Collected: 11/12/03 Time: 1240
% Moisture: decanted: (Y/N)	
GC Column: RTX-50-30M ID: .53 (r	
Concentrated Extract Volume: ((μL) Dilution Factor: 1 Analyst: DLB
Injection Volume: ((μL) Prep Method:
GPC Cleanup: (Y/N) N pH:	Analytical Method: OLMO 4.2
	Sulfur Cleanup: (Y/N) N Instrument ID: GCS11A
CONCENTRATION UNITS: ug/L	Lab File ID: 2031129/SV1102
CAS NO. COMPOUND	RESULT Q RL
72-54-8 4,4'-DDD	0.100 U 0.100
72-55-9 4,4'-DDE	0.100 U 0.100
50-29-3 4,4'-DDT	0.100 U 0.100
309-00-2 Aldrin	0.050 U 0.050
12674-11-2 Aroclor-1016	1.00 U 1.00
11104-28-2 Aroclor-1221	2.00 U 2.00
11141-16-5 Aroclor-1232	1.00 U 1.00
53469-21-9 Aroclor-1242	1.00 U 1.00
12672-29-6 Aroclor-1248	1.00 U 1.00
11097-69-1 Aroclor=1254	1.00 U 1.00
11096-82-5 Aroclor-1260	1.00 U 1.00
60-57-1 Dieldrin	0.100 U 0.100
959-98-8 Endosulfan I	0.050 U 0.050 0.100 U 0.100
33213-65-9 Endosulfan II 1031-07-8 Endosulfan sulfate	0.100 U 0.100 0.100 U 0.100
1031-07-8 Endosulfan sulfate 72-20-8 Endrin	0.100 U 0.100
7421-93-4 Endrin aldehyde	0.100 U 0.100
53494-70-5 Endrin ketone	0.100 U 0.100
76-44-8 Heplachlor	0.050 U 0.050
1024-57-3 Heptachlor epoxide	0.050 U 0.050
72-43-5 Methoxychlor	0.500 U 0.500
8001-35-2 Toxaphene	5.00 U 5.00
319-84-6 alpha-BHC	0.050 U 0.050
5103-71-9 alpha-Chlordane	0.050 U 0.050
319-85-7 beta-BHC	0.050 U 0.050
319-86-8 delta-BHC	0.050 U 0.050
58-89-9 gamma-BHC (Lindane)	0.050 U 0.050
5103-74-2 gamma-Chlordane	0.050 U 0.050

5103-74-2 gamma-Chlordane

SEMPOLATUE CROANIES ANALYSIS DATA SHEET

Lab Name: GCAL	Sample D SKGW581008	
Lab Code: LA024 Dase No.:	Contract	
Matrix: Water	\$45 No: SDG No.: 203111311	
Sample wt/vol: 1000 Units: mL	Lab Sample ID: 20311131114	
		
Level: (lowfmed)	Date Collected: 11/13/03 Time: 1510	
% Moisture: decanted: (Y/N)	Date Received: 11/14/03	
GC Column: RTX-50-30M !D: .53 (mm)	Date Analyzed: 11/30/03 Time: 0220	
Concentrated Extract Volume: (µL)	Dilution Factor: 1 Analyst: DLB	
Injection Volume: (µL)		-
	Analytical Method: OLMO 4.2	
W		
	Sulfur Cleanup: (Y/N) N Instrument ID: GCS11A	
CONCENTRATION I BITTO	Lab File ID: 2031129/SV1103	
CONCENTRATION UNITS: Ug/L		
CAS NO. COMPOUND	RESULT Q RL	
72-54-8 4,4'-000	C.100 U 0.100	
72-55-9 4,4'-DOE	0.100 U 0.100	
50-29-3 4,4'-00T	0.100 U 0.100	
309-00-2 Aldrin	0.050 U 0.050	
12674-11-2 Aroclor-1016	1.00 U 1.00	
11104-28-2 Aroclor-1221	2.00 U 2.00	
11141-16-5 Aroctor-1232	1.00 U 1.00	
53469-21-9 Aroctor-1242	1.00 U 1.00	
12672-29-6 Aroclor-1248	1.00 U 1.00	
11097-69-1 Arodor-1254	1.00 • 'U 1.00	
11096-82-5 Aroclor-1260	1.00 U 1.00	
60-57-1 Dieldrin	0.100 U 0.100	
959-98-8 Endosulfan i	0.050 U 0.050	
33213-65-9 Endosulfan II	0.100 U 0.100	
1031-07-8 Endosulfan sulfate	0.100 U 0.100	
72-20-8 Endrin	0.100 U 0.100	
7421-93-4 Endrin aldehyde	0.10C U 0.100	
53494-70-5 Endrin kelone	0.100 U 0.100	
76-44-8 Heptachior	0.050 U 0.050	
1024-57-3 Heptachior epoxide	0.050 U 0.050	
72-43-5 Methoxychlor	0.500 U 0.500	
8001-35-2 Toxaphene	5.00 U 5.00	
319-84-6 alpha-BHC	0.050 U 0.050	
5103-71-9 alpha-Chlordane	D 350 U 0.050	
319-85-7 beta-BHC	C 250 U 0.050	
319-86-8 delta-BHC	C C50 U 0.050	
58-89-9 gamma-BHC (Lindane)	0.250 U 0.050	
5103-74-2 gamma-Chiordane	0 050 U 0.050	

1D SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

Lab Name:	GCAL	Sample ID: SI	Sample ID: SKGW58FD1008			
Lab Code:	LA024 Case No.:	Contract:	Contract:			
Matrix: W				SDG No.: 203111311		
Sample wi/v	vol: 1000 Units: mL					
	med)	Date Collected:	11/13/03	Time: 1520		
	decanted: (Y/N)	Date Received:	Date Received: 11/14/03			
GC Column:	: RTX-50-30M ID: .53 (mm) Date Analyzed:	Date Analyzed: 11/30/03 Time: 0248			
Concentrate	d Extract Volume: (µL			Analyst: DLB		
	lume: (µL					
	ip: (Y/N) N pH:					
	FINAL PROPERTY OF THE PROPERTY			Instrument ID: GCS11A		
CONCENTR	RATION UNITS: ug/L	Lab File ID: 20	31129/SV1	1103		
CAS NO.	COMPOUND	RESULT	Q	RL		
72-54-8	4,4'-DDD	0.100	U	0.100		
72-55-9	4,4'-DDE	0.100	Ú	0.100		
50-29-3	4,4'-DDT	0.100	U	0.100		
309-00-2	Aldrin	0.050	U	0.050		
12674-11-2	Aroclor-1016	1.00	U	1.00		
11104-28-2	Aroclor-1221	2.00	U	2.00		
11141-16-5	Aroclor-1232	1.00	U	1.00		
53469-21-9	Arocior-1242	1.00	U	1.00		
12672-29-6	Aroclor-1248	1.00	U	1.00		
11097-69-1	Aroclor-1254	1.00	U	1.00		
11096-82-5	Aroclor-1260	1.00	ΰ	1.00		
60-57-1	Dieldrin	0.100	U	0.100		
959-98-8	Endosulfan I	0.050	U	0.050		
33213-65-9	Endosulfan II	0.100	υ	0.100		
1031-07-8	Endosulfan sulfate	0.100	U	0.100		
72-20-8	Endrin	0.100	U	0.100		
7421-93-4	Endrin aldehyde	0.100	U	0.100		
53494-70-5	Endrin ketone	0.100	U	0.100		
76-44-8	Heptachlor	0.050	U	0.050		
1024-57-3	Heptachlor epoxide	0.050	U	0.050		
72-43-5	Methoxychlor	0.500	Ū	0.500		
8001-35-2	Toxaphene	5.00	U	5.00		
319-84-6	alpha-BHC	0.050	Ü	0.050		
5103-71-9	alpha-Chlordane	0.050	U	0.050		
319-85-7	beta-BHC	0.050	U	0.050		
319-86-8	delta-BHC	0.050	ü	0.050		
58-89-9	gamma-BHC (Lindane)	0.050	U	0.050		

0.050

gamma-Chlordane

0.050

SEMNICLAT LE CROANICS ANALYS SIDYTA SHEET

Lab Name: GCAL	Sample D. SKGWFB1008		
Lab Code: LA024 Dase No.:	Contract:		
Matrix: Water	SAS No. SDG No.: 20311131	11	
Sample wit/volt 1000 Units. mi.	Lab Sample ID: 20311131116		
Level: (lowhned)	Date Collected: 11/13/03 Time: 1545		
% Moisture: decanted: (Y/N)	Date Received: 11/14/03		
) Date Analyzed: 11/30/03 Time: 0316		
			
	Ollution Factor: 1 Analyst DLB		
Injection Volume: (µL	Prep Method:		
GPC Cleanup: (Y/N) N OH:	Analytical Method: OLMO 4.2		
	Sulfur Cleanup: (Y/N) N Instrument ID: GCS1	1 A	
CONCENTRATION UNITS: ugt.	Lab File D: 2031129/SV1103		
ALC NO COMPOUND	RESULT Q RL		
CAS NO. COMPOUND			
72-54-8 4,4'-00D 72-55-9 4.4'-00E	0.100 U 0.100		
72-55-9 4.4'-DOE 50-29-3 4.4'-DOT	0 100 U 0.100		
309-00-2 Aldrin	0.050 U 0.050		
12674-11-2 Arocior-1016	1,00 U 1,00		
11104-28-2 Aroclor-1221	2.00 U 2.00		
11141-16-5 Aracior-1232	1.00 U 1.00		
53469-21-9 Arocior-1242	1.00 U 1.00		
12672-29-6 Aroctor-1248	·.00 U 1.00		
11097-69-1 Aroctor-1254	1.00 U 1.00		
11096-82-5 Aroctor-1260	1.00 U 1.00		
60-57-1 Dieldrin	0.100 U 0.100		
959-98-8 Endosulfan I	3.053 U 0.050		
33213-65-9 Endosulfan II	0.100 U 0.100		
1031-07-8 Endosulfan sulfate	0.100 U 0.100		
72-20-8 Endrin	9.100 U 0.100		
7421-93-4 Endrin aldehyde	0.100 U 0.100		
53494-70-5 Endrin ketone	0.100 U 0.100		
76-44-8 Heptachlor	0.050 U 0.050		
1024-57-3 Heptachlor epoxice	0.050 U 0.050		
72-43-5 Methoxychlor	2.500 U 0.500		
8001-35-2 Toxaphene	5 00 U 5.00		
319-84-6 alpha-BHC	0.050 U 0.050		
5103-71-9 alpha-Chlordane	0.050 U 0.050		
319-85-7 beta-BHC	0.050 U 0.050		
319-86-8 deta-BHC			
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5103-74-2 gamma-Chiordane	0.050 U 0.050		

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

Lab Name: GCAL	Sample ID: SKGW261008			
Lab Code: LA024 Case No.:				
	Contract:			
Matrix: Water	SAS No.: SDG No.: 203111311			
Sample wt/vol: 1000 Units: mL	Lab Sample ID: 20311131121			
Level: (low/med)	Date Collected: 11/14/03 Time: 1240			
% Moisture: decanted: (Y/N)	Date Received: 11/15/03			
GC Column: RTX-50-30M ID: .53 (mm)	Date Analyzed: 11/30/03 Time: 0124			
Concentrated Extract Volume: (µL)	Dilution Factor: 1 Analyst: DLB			
	Prep Method:			
Injection Volume: (µL)				
GPC Cleanup: (Y/N) N pH:	Analytical Method: OLMO 4.2			
	Sulfur Cleanup: (Y/N) N Instrument ID: GCS11A			
	Lab File ID: 2031129/SV1103			
CONCENTRATION UNITS: ug/L	2031129/3V1103			
CAS NO. COMPOUND	RESULT Q RL			
72-54-8 4,4'-DDD	0.100 U 0.100			
72-55-9 4,4'-DDE	0.100 U 0.100			
50-29-3 4,4'-DDT	0.100 U 0.100			
309-00-2 Aldrin	0.050 U 0.050			
12674-11-2 Aroclor-1016	1.00 U 1.00			
11104-28-2 Aroclor-1221	2.00 U 2.00			
11141-16-5 Aroclor-1232	1.00 U 1.00			
53469-21-9 Aroclor-1242	1.00 U 1.00			
12672-29-6 Aroclor-1248	1.00 U 1.00			
11097-69-1 Aroclor-1254	1.00 U 1.00			
11096-82-5 Aroclor-1260	1.00 U 1.00			
60-57-1 Dieldrin	0.100 U 0.100			
959-98-8 Endosulfan i	0.050 U 0.050			
33213-65-9 Endosulfan II	0.100 U 0.100			
1031-07-8 Endosulfan sulfate	0.100 U 0.100			
72-20-8 Endrin	0.100 U 0.100			
7421-93-4 Endrin aldehyde	0.100 U 0.100			
53494-70-5 Endrin ketone	0.100 U 0.100			
76-44-8 Heptachlor	0.050 U 0.050			
1024-57-3 Heptachlor epoxide	0.050 U 0.050			
72-43-5 Methoxychlor	0.500 U 0.500			
8001-35-2 Toxaphene	5.00 U 5.00			
319-84-6 alpha-BHC	0.050 U 0.050			
5103-71-9 alpha-Chlordane	0.050 U 0.050			
319-85-7 beta-BHC	0.050 U 0.050			
319-86-8 delta-BHC	0.050 U 0.050			
58-89-9 gamma-BHC (Lindane)	0.050 U 0.050			
5103-74-2 gamma-Chlordane	0.050 U 0.050			

SEMPLOCATILE ORGANICS ANALYSIS DATE SHEET

Lab Name: GCAL	Sample D SKGW301005			
Lab Code: LA024 Case No.	Centract:			
Matrix: Water	SAS No SDG No.: 203111311			
Sample wit/rolt 1000 Units: mil.	Lab Sample ID: 20311131122			
Level: (low/med)	Date Collected: 11/14/03 Time: 1015			
% Moisture: decanted: (Y/N)	Cate Received: 11/15/03			
GC Column: RTX-50-30M (D: _53 (m	nm) Date Analyzed: 11/29/03 Time: 2303			
Concentrated Extract Volume: (µ	uL.) Dilution Factor: 1 Analyst: DLB			
 	rL.) Prep Method:			
GPC Cleanup: (Y/N) N pH:	Analytical Method: OLMO 4.2			
	Sulfur Cleanup: (Y/N) N Instrument ID: GCS11A			
CONCENTRATION LATER.	Lab File ID: 2031129/SV1102			
CONCENTRATION UNITS: ug/L				
CAS NO. COMPOUND	RESULT Q RL			
72-54-8 4,4'-000	D. *DC U 0.100			
72-55-9 4.4'-DOE	0.100 U 0.100			
50-29-3 4,4'-DOT	0.100 U 0.100			
309-00-2 Aldrin	0.050 U 0.050			
12674-11-2 Aroclor-1016	1.0C U 1.00			
11104-28-2 Aroclor-1221	2.0C U 2.00			
11141-16-5 Aroctor-1232	1.00 U 1.00			
53469-21-9 Aroclor-1242	1.00 U 1.00			
12672-29-6 Aroclor-1248	1.00 U 1.00			
11097-69-1 Aroclor-1254	00.1 U OC. •			
11096-82-5 Aroctor-1260	1.00 U 1.00			
60-57-1 Dieldrin	0 100 U 0.100			
959-98-8 Endosulfan I	0.050 U 0.050			
33213-65-9 Endosulfan il	0.100 U 0.100			
1031-07-8 Endosulfan sulfate	0.10C U 0.100			
72-20-8 Endrin	0.100 U 0.100			
7421-93-4 Endrin aldehyde	0.100 U 0.100			
53494-70-5 Endrin ketone	0.10C U 0.100			
76-44-8 Heptachlor	0.050 U 0.050			
1024-57-3 Heptachlor equide	0 050 U 0.050			
72-43-5 Metharychlor	0 500 U 0.500			
8001-35-2 Toxaphene	5 00 U 5.00			
319-84-5 alpha-BHC	C.35C U 0.050			
5103-71-9 alpha-Chlordane	C.05C U 0.050			
319-85-7 beta-BHC	C.05C U 0.050			
319-86-8 delta-BHC	0 350 U 0.050			
58-89-9 gamma-BHC (Lindane)	0.250 U 0.050			
5103.74.2 comma Chicelana	0.050			

1D SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

Lab Name: GCAL	Sample ID: SKGW611008			
Lab Code: LA024 Case No.:	Contract:			
Matrix: Water	SAS No.: SDG No.: 203111311			
Sample wt/vol: 1000 Units: mL	Lab Sample ID: 20311131123			
Level: (low/med)	Date Collected: 11/14/03 Time: 1100			
% Moisture: decanted: (Y/N)	Date Received: 11/15/03			
GC Column: RTX-50-30M ID: .53 (mm)	Date Analyzed: 11/29/03 Time: 2331			
Concentrated Extract Volume: (µL)				
Injection Volume: (µL)	Prep Method:			
GPC Cleanup: (Y/N) N pH:	Analytical Method: OLMO 4.2			
	Sulfur Cleanup: (Y/N) N Instrument ID: GCS11A			
CONCENTRATION UNITS: ug/L	Lab File ID: 2031129/SV1102			
•				
CAS NO. COMPOUND	RESULT Q RL			
72-54-8 4,4'-DDD	0.100 U 0.100			
72-55-9 4,4'-DDE	0.100 U 0.100			
50-29-3 4,4'-DDT	0.100 U 0.100			
309-00-2 Aldrin	0.050 U 0.050			
12674-11-2 Aroclor-1016	1.00 U 1.00			
11104-28-2 Aroclor-1221	2.00 U 2.00			
11141-16-5 Aroclor-1232	1.00 U 1.00			
53469-21-9 Aroclor-1242	1.00 U 1.00			
12672-29-6 Aroclor-1248	1.00 U 1.00			
11097-69-1 Aroclor-1254	1.00 U 1.00			
11096-82-5 Aroclor-1260	1.00 U 1.00			
60-57-1 Dieldrin	0.100 U 0.100			
959-98-8 Endosulfan I	0.050 U 0.050			
33213-65-9 Endosulfan II	0.100 U 0.100			
1031-07-8 Endosulfan sulfate	0.100 U 0.100			
72-20-8 Endrin	0.100 U 0.100			
7421-93-4 Endrin aldehyde	0.100 U 0.100			
53494-70-5 Endrin ketone	0.100 U 0.100			
76-44-8 Heptachlor	0.050 U 0.050			
1024-57-3 Heptachlor epoxide	0.050 U 0.050			
72-43-5 Methoxychlor	0.500 U 0.500			
8001-35-2 Toxaphene	5.00 U 5.00			
319-84-6 alpha-BHC	0.050 U 0.050			
5103-71-9 alpha-Chlordane	0.050 U 0.050			
319-85-7 beta-BHC	0.050 U 0.050			
319-86-8 delta-BHC	0.050 U 0.050			
58-89-9 gamma-BHC (Lindane)	0.050 U 0.050			
5103-74-2 gamma-Chlordane	0.050 U 0.050			

SEMINDUATUE CRISANICS ANALYSIS CATA SHEET

Lab Name: GCAL	Sample I SKGW631008			
Lab Code: UA024 Case No.:	Contract.			
Matrix: Water	SAS No : SDG No.: 203111311			
Sample wt/vol: 1000 Units: mL	Lab Sample 'D: 20311131127			
Level: (low/med)	Date Collected: 11/14/03 Time: 1220			
% Moisture: decanted: (Y/N)	Date Received: 11/15/03			
GC Column: RTX-50-30M ID: .53 (mm)				
Concentrated Extract Volume: (µL)	Oilution Factor: 1 Analyst: DLB			
Injection Volume: (µL)	Prep Method:			
GPC Cleanup: (Y/N) N pH:	Analytical Method: OLMO 4.2			
	Sulfur Cleanup: (Y/N) N Instrument ID: GCS11A			
CONCENTRATION UNITS: ug/t.	Lab File ID: 2031129/SV1103			
CAS NO. COMPOUND	RESULT Q RL			
72-54-8 4,4'-DOD	0.10C U 0.100			
72-55-9 4,4'-DDE	0.10C U 0.100			
50-29-3 4,4'-00T	0.10C U 0.100			
309-00-2 Aldrin	0.050 U 0.050			
12674-11-2 Aroclor-1016	1.00 U 1.00			
11104-28-2 Arocior-1221	2.00 U 2.00			
11141-16-5 Arocior-1232	1.00 U 1.00			
53469-21-9 Arocior-1242	1.00 U 1.00			
12672-29-6 Aroclor-1248	1.00 U 1.00			
11097-69-1 Arodor-1254	1.00 U 1.00			
11096-82-5 Arector-1260	1.00 U 1.00			
60-57-1 Dieldrin	0.100 U 0.100			
959-98-8 Endosulfan i	0.050 U 0.050			
33213-65-9 Endosulfan II	0.100 U 0.100			
1031-07-8 Endosulfan sulfate	0.100 U 0.100			
72-20-8 Endrin	0.100 U 0.100			
7421-93-4 Endrin aldehyde	0.100 U 0.100			
53494-70-5 Endrin ketone	3.100 U 0.100			
76-44-8 Heptachlor	0.050 U 0.050			
1024-57-3 Heptachlor epoxide	0.050 U 0.050			
72-43-5 Methoxychlor	0.500 U 0.500			
8001-35-2 Toxaphene	5 00 U 5.00			
319-84-6 alpha-BHC	0.050 U 0.050			
5103-71-9 alpha-Chlordane	0.050 U 0.050			
319-85-7 beta-BHC	0.050 U 0.050			
319-86-8 delta-BHC	0.050 U 0.050			
58-89-9 gamma-BHC (Lindane:	0.050 U 0.050			
5103-74-2 gamma-Chiordane	3.050 U 0.050			

1D SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

Lab Name: GCAL	Sample ID: SKGW241008				
Lab Code: LA024 Case	Contract:				
Matrix: Water	SAS No.:		SDG No.:	203111311	
Sample wt/vol: 1000 Units:	Lab Sample ID	: 2031113	31128		
Level: (low/med)		Date Collected	: 11/14/03	Time:	1435
% Moisture: decanted		Date Received: 11/15/03			
GC Column: RTX-50-30M	ID: <u>.53</u> (mm)	Date Analyzed	11/30/03	Time: _	0152
Concentrated Extract Volume:	(µL)	Dilution Factor	: 1	Analyst:	DLB
Injection Volume:	(µL)	Prep Method:		·	
GPC Cleanup: (Y/N) N		Analytical Meth			
· · · · · · · · · · · · · · · · · · ·				Instrument ID) GCS11A
					. 603114
CONCENTRATION UNITS: ug/L		Lab File ID: 2	031129/SV	1103	
•					
CAS NO. COMPOUND		RESULT	Q	RL	
72-54-8 4,4'-DDD		0.100	U	0.100]
72-55-9 4,4 '-DDE		0.100	U	0.100	
50-29-3 4,4'-DDT	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	0.100	Ü	0.100]
309-00-2 Aldrin		0.050	U	0.050	
12674-11-2 Aroclor-1016		1.00	U	1.00	}
11104-28-2 Aroclor-1221		2.00	U	2.00	
11141-16-5 Aroclor-1232	·	1.00	U	1.00	
53469-21-9 Aroclor-1242		1.00	U	1.00	
12672-29-6 Aroclor-1248		1.00	U	1.00	
11097-69-1 Aroclor-1254		1.00	U	1.00	•
11096-82-5 Aroclor-1260		1.00	U	1.00	
60-57-1 Dieldrin 959-98-8 Endosulfan I		0.100	υ	0.100	
33213-65-9 Endosulfan II		0.000	- 0 -	0.100	
1031-07-8 Endosulfan sulfate	 	0.100	Ü	0.100	
72-20-8 Endrin		0.100	Ü	0.100	
7421-93-4 Endrin aldehyde		0.100	U	0.100	
53494-70-5 Endrin ketone		0.100	U	0.100	
76-44-8 Heptachlor			Ü	0.050	
1024-57-3 Heptachlor epoxide			U	0.050	
72-43-5 Methoxychlor		0.050 0.500	U	0.500	
8001-35-2 Toxaphene		5.00	U	5.00	
319-84-6 alpha-BHC		0.050	Ū	0.050	
5103-71-9 alpha-Chlordane		0.050	Ū	0.050	
319-85-7 beta-BHC		0.050	U	0.050	
319-86-8 delta-BHC		0.050	U	0.050	
58-89-9 gamma-BHC (Lindane)		0.050	υ	0.050	
5103-74-2 gamma-Chlordane		0.050	U	0.050	

U

5103-74-2 gamma-Chlordane

DATA VALIDATION REPORT

FOR

SKINNER LANDFILL SITE

EARTH TECH: PROJECT NUMBER 38335

LABORATORY REPORT NUMBER 203111413

PROJECT MANAGER: Ron Rolker

Date: January 15, 2004

Data Validator: Mark Kromis

APPENDIX C LIST OF ACRONYMS

BFB Bromofluorobenzene CC Continuing Calibration

CCV Continuing Calibration Verification
CCB Continuing Calibration Blanks
CLP Contract Laboratory Program
CRDL Contract Required Detection Limit
DFTPP Decafluorotriphenylphosphine

GC/MS Gas Chromatograph Mass Spectrometer

IC Initial Calibration

ICB Initial Calibration Blank
IDL Instrument Detection Limit
ICP Inductively Coupled Plasma
ICS Interference Check Sample
ICV Initial Calibration Verification

ILM Inorganic Analysis Multi-Media Multi-Concentration

INDAM Individual A Mixture INDBM Individual B Mixture mg/L milligrams per liter

MS/MSD Matrix Spike Matrix Spike Duplicate
OLC Organic Analysis Low Concentration

OLM Organic Analysis Multi-Media Multi-Concentration

%D Percent Difference

% RSD Percent Relative Standard Deviation

PB Preparation Blanks
QC Quality Control
RF Response Factor

RPD Relative Percent Difference
RRF Relative Response Factor
SDG Sample Delivery Group
SOW Statement of Work

µg/L micrograms per liter

US EPA United States Environmental Protection Agency

VOC Volatile Organic Compounds
VTSR Validated Time of Sample Receipt

DATA VALIDATION SUMMARY – SAMPLE DELIVERY GROUP 203111413 INORGANICS

Validation of the inorganics data, as prepared by Gulf Coast Analytical Laboratories (GCAL) for the samples collected from the Skinner Landfill site in November 2003, was conducted by Earth Tech using the National Functional Guidelines for Inorganic Data Review, (US EPA, February, 1994), as appropriate. These data were reported by GCAL under Sample Delivery Group (SDG) 203111413.

GCAL#	Sample Description
203111413-01	SKSW511008
203111413-02	SKSW511008 MS
203111413-04	SKSW511008 DUP
203111413-05	SKSWFB1008
203111413-06	SKSW521008
203111413-07	SKSW531008
203111413-08	SKSW511008 (DISS)
203111413-09	SKSW511008 MS (DISS)
203111413-10	SKSW511008 DUP (DISS)
203111413-11	SKSWFB1008 (DISS)
203111413-12	SKSW521008 (DISS)
203111413-13	SKSW531008 (DISS)

INTRODUCTION

Analysis of metals were performed according to Contract Laboratory Program (CLP)-Inorganic Analysis Multi-media Multi-concentration ILM04.1 Statement of Work (SOW). Results of the sample analyses are reported by the laboratory as either qualified or unqualified. Unqualified results mean that the reported values maybe used without reservation. Various qualifier codes are used by the laboratory to denote specific information regarding the analytical results.

The data validation process is intended to evaluate the data on a technical basis. The data package also was subjected to an internal laboratory quality review prior to submission to Earth Tech for data validation.

During the validation process, laboratory-qualified and unqualified data are verified against all available supporting documentation. Based on this evaluation, qualifier codes may be added, deleted or modified by the data user. Final results are therefore, either qualified or unqualified. Validator-qualified results are annotated with the following codes in accordance with the Functional Guidelines:

U The constituent was analyzed for, but was not detected above the level of the associated analytical reporting limit. The associated value is either the sample quantitation limit or the sample detection limit.

- J The analyte was positively identified, the associated numerical value is the approximate concentration of the analyte in the sample.
- UJ The analyte was not detected above the reported sample quantitation limit. However, the reported quantitation limit is approximate and may or may not represent the actual limit of quantitation necessary to accurately and precisely measure the analyte in the sample.
- R The sample results are rejected due to serious deficiencies in the ability to analyze the sample and meet quality control criteria. The presence or absence of the analyte cannot be verified.

Details of the inorganics data validation findings and conclusions are provided in the following sections of this report:

- 1. Holding Times
- 2. Calibration
 - A. Initial Calibration (IC)
 - B. Continuing Calibration (CC)
- 3. Blanks
- 4. Inductively Coupled Plasma (ICP) Interference Check Sample
- 5. Laboratory Control Sample (LCS)
- 6. Duplicate Analysis
- 7. Spike Sample Analysis
- 8. ICP Serial Dilution
- 9. System Performance
- 10. Documentation
- 11. Overall Assessment

1. HOLDING TIMES

All samples for inorganics analyses were analyzed within the 180-day holding time for preserved aqueous samples. Mercury analyses were conducted within the 28-day holding time for aqueous samples undergoing CLP protocol. Cyanide analyses were conducted within the 14-day holding time. The cooler temperature upon receipt at the laboratory was within the recommended temperature of 4°C +/- 2°C.

2. CALIBRATION

A. Initial Calibration

The percent recoveries for the Initial Calibration Verification (ICV) standard were within Quality Control (QC) limits for all constituents.

B. Continuing Calibration

The percent recoveries for the Continuing Calibration Verification (CCV) standard were within OC limits for all constituents.

3. BLANKS

The Initial Calibration Blank (ICB), Continuing Calibration Blanks (CCB) and Preparation Blanks (PB) were analyzed at the appropriate frequencies. No constituents were detected in the ICB, CCB, and PB blanks above the corresponding Contract Required Detection Limit (CRDL).

4. ICP INTERFERENCE CHECK SAMPLE

Results for the ICP analysis of the Interference Check Sample (ICS) solution AB were within 20% of the true value.

5. LABORATORY CONTROL SAMPLES

Recoveries were within the control limit (80-120%) for all constituents.

6. DUPLICATE ANALYSIS

The Relative Percent Difference (RPD) between the sample and duplicate results were within the acceptance criteria for all target compounds with the exception of Zinc in the dissolved fraction. The Zinc results were previously qualified do to the low percent recovery for Zinc in the CRDL standard.

SPIKE SAMPLE ANALYSIS

The laboratory used sample SKSW511008 and SESW511008 (Dissolved) for the matrix spike sample. The MS percent recoveries were within the acceptance criteria (75%-125%) in the total and dissolved fractions with the exception of Selenium (0%). As per the National Functional Guidelines: if the percent recovery is less than 10% then qualify detected results for that analyte with "I" and non-detected results with "R".

8. ICP SERIAL DILUTION

As noted in the National Functional Guidelines: If the analyte concentration is at least 50 times above the IDL, its serial dilution analysis must then agree within 10% of the original determination after corrected for dilution. The serial dilution is performed to determine whether any significant chemical or physical interference's exist due to matrix effects. The percent differences were within the acceptance criteria for all target analytes in the total and dissolved fractions.

9. SYSTEM PERFORMANCE

The analytical system appears to have been working well at the time of these analyses, based on the evaluation of the raw data.

10. DOCUMENTATION

The documentation appeared accurate and in order.

11. OVERALL ASSESSMENT

There was no target analytes detected in the Field Blank analyzed for total metals. Barium, Copper, and Zinc were detected in the Field Blank (Dissolved) at a concentration of 0.3 B, 1.6 B and 0.6 B ppb respectively. It should be noted that the laboratory supplied the water used for the Field Blank. The results that are greater than the IDL but less than the CRDL are flagged with a ("B") qualifier by the laboratory.

The percent recoveries for Zinc in the Contract Required Detection Limit (CRDL) standards were 69.8%, 69.7%, 70.1%, and 70.9%. The detected Lead results were qualified with a "J" and the non-detected Lead results were qualified with "UJ".

The results are acceptable with the validator-added qualifiers.

DATA VALIDATION SUMMARY – SAMPLE DELIVERY GROUP 203111413 SEMIVOLATILE ORGANICS

Validation of the Gas Chromatograph/Mass Spectrometer (GC/MS) semi-volatile organics data, as prepared by Gulf Coast Analytical Laboratories (GCAL) for the samples collected from the Skinner Landfill site in November 2003, was conducted by Earth Tech using the National Functional Guidelines for Organic Data Review, (US EPA, October, 1999) as appropriate. These data were reported by GCAL under SDG 203111413.

GCAL#	Sample Description
203111413-01	SKSW511008
203111413-02	SKSW511008 MS
203111413-03	SKSW511008 MSD
203111413-05	SKSWFB1008
203111413-06	SKSW521008
203111413-07	SKSW531008

INTRODUCTION

Analyses were performed according to CLP-Organic Analysis Multi-Media, Multi-Concentration OLM04.2 SOW. Results of the sample analyses are reported by the laboratory as either qualified or unqualified. Unqualified results mean that the reported values may be used without reservation. Various data qualifier codes are used by the laboratory to denote specific information regarding the analytical results. The data validation process is intended to evaluate the data on a technical basis. The data package also was subjected to an internal laboratory quality review prior to submission to Earth Tech for data validation.

During the validation process, laboratory-qualified and unqualified data are verified against all available supporting documentation. Based on this evaluation, qualifier codes may be added, deleted or modified by the data user. Final results are therefore, either qualified or unqualified. Validator-qualified results are annotated with the following codes in accordance with the Functional Guidelines:

- U The constituent was analyzed for, but was not detected above the level of the associated analytical reporting limit. The associated value is either the sample quantitation limit or the sample detection limit.
- J The analyte was positively identified; the associated numerical value is the approximate concentration of the analyte in the sample.
- UJ The analyte was not detected above the reported sample quantitation limit. However, the reported quantitation limit is approximate and may or may not represent the actual limit of quantitation necessary to accurately and precisely measure the analyte in the sample.

R The sample results are rejected line a serious deficiencies in the ability to analyze the sample and meet quality control criteria. The presence or absence of the analyte cannot be verified.

Details of the semivolatile data validation findings and conclusions are provided in the following sections of this report:

- 1. Holding Times
- 2. GC/MS Tuning
- 3. Calibration
 - A. IC
 - B. CC
- 4. Blanks
- 5. System Monitoring Compound Recovery
- 6. MS/MSD
- 7. Internal Standards Performance
- 8. Compound Identification
- 9. Constituent Quantitation and Reported Detection Limits
- 10. System Performance
- 11. Documentation
- 12. Overall Assessment

1. HOLDING TIMES

All samples were initially extracted within the seven-day technical holding time and the five-day VTSR method holding time. The cooler temperature upon receipt at the laboratory was within the recommended temperature of $4^{\circ}C = -2^{\circ}C$.

2. GC/MS TUNING

The samples were analyzed on a single GCMS system, identified as MSSV2. Two decafluorotriphenylphosphine (DFTPP) tunes were run representing the shift in which the standards and samples were analyzed. The DFTPP tunes are acceptable.

3. CALIBRATION

A. Initial Calibration

One IC dated 11/26/03 was analyzed in support of the semivolatile sample analyses. Documentation of the IC was present in the data package, and the Relative Response Factor (RRF), as well as percent % RSD values were accurately reported for all target compounds. The criteria employed for technical data review purposes are different than those used in the method. The laboratory must meet a minimum RRF of 0.01; however, for data review purposes, a RRF criterion of "greater than or equal to 0.05" is applied to all semi-volatile compounds. The RRF's and the average RRF were within the acceptance criteria specified in the method for all reported analytes with the exception of 4-Chloroaniline. As per the National Functional Guidelines, if any initial calibration RRF is less than 0.05, qualify positive results that have acceptable mass spectral identification with "J", using professional judgement, and non-detected analytes as unusable (R).

The %RSD's were within the acceptance criteria specified in the method for all target analytes with the exception of Naphthalene (30.1%), 2,4-Dinitrophenol (34.8%), Diethylphthalate (35.1%), Di-n-butylphthalate (47.4%), Di-n-octylphthalate (37.3%), and Caprolactam (35.8%). The lowest point of the calibration curve was dropped for Diethylphthalate and the %RSD was recalculated. The recalculated %RSD was 8.4%, which is within the acceptance criteria of less than 30%. Diethylphthalate results less than 50 ppb but greater than the IDL were qualified as estimated with a "J" by the data validator. The highest point of the calibration curve was dropped for Naphthalene and Caprolactam and the %RSD were recalculated. The recalculated %RSD was 28.1% and 9.0%, which are within the acceptance criteria of less than 30%. Naphthalene and Caprolactam results greater than 160 ppb were qualified as estimated with a "J" by the data validator. As per the National Functional Guidelines, if the %RSD is greater than the acceptance criteria of 30% then qualify detected results as estimated with "J".

B. Continuing Calibration

Two CCs dated 11/26/03 and 12/1/03 were analyzed in support of the semivolatile sample analyses reported in the data submissions.

The RRF's for the CC dated 11/26/03 were within the acceptance criteria. The percent difference (%D) between the average RRF's and the CC Response Factors for the CC dated 11/26/03 were within the acceptance criteria with the exception the %D for 2,4-Dintrophenol, Dinbutylphthalate, and Di-n-octylphthalate. As per the National Functional Guidelines, if the %D exceeds the acceptance criteria qualify detected results for that analyte with "J" and non-detected results for that analyte with "UJ".

The RRF's for the CC dated 12/1/03 were within the acceptance criteria. The percent difference (%D) between the average RRF's and the CC Response Factors for the CC dated 12/1/03 were within the acceptance criteria with the exception the %D for Naphthalene, Hexachlorocyclopentadiene, 2,4-Dinitrophenol, Di-n-butylphthalate, and Di-n-octylphthalate.

As per the National Functional Guidelines, if the 6 D exceeds the acceptance criteria qualify detected results for that analyte with "J" and non-detected results for that analyte with "UJ".

4. BLANKS

One laboratory semivolatile method blank and one field blank were analyzed with this SDG. The results are summarized below.

Method Blank (MB 131004)

Di-n-butyl phthalate (0.731 ppb) was detected in the method blank extracted on 11/18/03. The results for Di-n-butyl phthalate less than 7.31 ppb were qualified with "U" for samples extracted with method blank 131004.

Bis (2-Ethylhexyl) phthalate (0.331 J ppb) was also detected in the method blank extracted on 11/18/03. The results for bis (2-Ethylhexyl) phthalate less than 3.31 ppb were qualified with "U" for samples extracted with method blank 131004.

Field Blank (SKSW00FB1008)

The presence of Di-n-butyl phthalate and bis (2-Ethylhexyl) phthalate detected in the field blank was mitigated because Di-n-butyl phthalate and bis (2-Ethylhexyl) phthalate were detected in the associated method blank.

5. SYSTEM MONITORING COMPOUND RECOVERY

All reported semivolatile system monitoring compounds were recovered within acceptable control limits.

6. MATRIX SPIKE/MATRIX SPIKE DUPLICATE

Sample SKSW511008 was used for the matrix spike matrix spike duplicate sample. The MS/MSD percent recoveries were within the acceptance criteria with the exception of 4-Nitrophenol in the MS and 4-Nitrophenol and 2,4-Dinitrotoluene in the MSD. The RPD between the MS and MSD were within the acceptance criteria. As per the National Functional Guidelines, no action is taken on MS/MSD data alone.

7. INTERNAL STANDARDS PERFORMANCE

Internal standard areas and retention times were within acceptable limits for the reported semivolatile sample analyses.

8. COMPOUND IDENTIFICATION

All reported semivolatile constituents were correctly identified with supporting chromatograms present in the data package.

9. CONSTITUENT QUANTITATION AND REPORTED DETECTION LIMITS

Constituent quantitations were correctly calculated and reported for semivolatile constituents.

10. SYSTEM PERFORMANCE

The analytical system appears to have been working well at the time of these analyses, based on the evaluation of the raw data submitted for review.

11. DOCUMENTATION

The documentation appeared accurate and in order.

12. OVERALL ASSESSMENT

There was low-level Di-n-butylphthalate and bis (2-Ethylhexyl) phthalate contamination associated with the extraction/analysis of the groundwater samples. It should be noted that phthalates are a common laboratory. The presence of Di-n-butylphthalate and bis (2-Ethylhexyl) phthalate was mitigated in all of the groundwater samples. The results are acceptable with the validator-added qualifiers.

DATA VALIDATION SUMMARY – SAMPLE DELIVERY GROUP 203111413 VOLATILE ORGANIC

Validation of the GC/MS volatile organics data, as prepared by Gulf Coast Analytical Laboratories (GCAL) for the samples collected from the Skinner Landfill site in November 2003, was conducted by Earth Tech using the National Functional Guidelines for Organic Data Review, (US EPA, October, 1999), as appropriate. These data were reported by GCAL under SDG 203111413.

GCAL#	Sample Description
203111413-01	SKSW511008
203111413-02	SKSW511008 MS
203111413-03	SKSW511008 MSD
203111413-05	SKSWFB1008
203111413-06	SKSW521008
203111413-07	SKSW531008

INTRODUCTION

Analyses were performed according to CLP-Organic Analysis Low Concentration OLC02.0 SOW. Results of the sample analyses are reported by the laboratory as either qualified or unqualified. Unqualified results mean that the reported values may be used without reservation. Various qualifier codes are used by the laboratory to denote specific information regarding the analytical results. The data validation process is intended to evaluate the data on a technical basis. The data package also was subjected to an internal laboratory quality review prior to submission to Earth Tech for data validation.

During the validation process, laboratory-qualified and unqualified data are verified against all available supporting documentation. Based on this evaluation, qualifier codes may be added, deleted or modified by the data user. Final results are therefore, either qualified or unqualified. Validator-qualified results are annotated with the following codes in accordance with the Functional Guidelines:

- U The constituent was analyzed for, but was not detected above the level of the associated analytical reporting limit. The associated value is either the sample quantitation limit or the sample detection limit.
- J The analyte was positively identified: the associated numerical value is the approximate concentration of the analyte in the sample.
- UJ The analyte was not detected above the reported sample quantitation limit.

However, the reported quantitation limit is approximate and may or may not represent the actual limit of quantitation necessary to accurately and precisely measure the analyte in the sample.

R The sample results are rejected due to serious deficiencies in the ability to analyze the sample and meet quality control criteria. The presence or absence of the analyte cannot be verified.

The volatiles data validation findings and conclusions are provided in the following sections of this report:

- 1. Holding Times
- 2. GC/MS Tuning
- 3. Calibration
 - A. IC
 - B. CC
- 4. Blanks
- 5. System Monitoring Compound Recovery
- 6. MS/MSD
- 7. Laboratory Control Sample
- 8. Internal Standards Performance
- 9. Compound Identification
- 10. Constituent Quantitation and Reported Detection Limits
- 11. System Performance
- 12. Documentation
- 13. Overall Assessment

1. HOLDING TIMES

All samples for Volatile Organic Compounds (VOC) analyses were analyzed within the 14-day technical holding time and the 10-day VTSR method holding time. The cooler temperature upon receipt at the laboratory was within the recommended temperature of 4°C +/- 2°C.

2. GC/MS TUNING

All samples were analyzed on a single GCMS system, identified as MSV2. Two bromofluorobenzene (BFB) tunes were run. The BFB tunes were acceptable.

3. CALIBRATION

A. Initial Calibration

Two ICs dated 11/17/03 and 11/18/03 were analyzed on Instrument MSV2 in support of the volatile sample analyses reported in the data submissions. Documentation of the IC standards was present in the data package, and RRF's as well as %RSD values were accurately reported. The criteria employed for technical data review purposes are different than those used in the method. The laboratory must meet a minimum RRF of 0.01; however, for data review purposes, a RRF criterion of "greater than or equal to 0.05" is applied to all volatile compounds. The %RSD's were within the acceptance criteria specified in the method for all target analytes.

The RRF's and the average RRF for the IC dated 11 17 03 were within the acceptance criteria specified in the method for all target analytes with the exception of Acetone and 2-Butanone. As per the National Functional Guidelines, if any initial calibration RRF is less than 0.05, qualify positive results that have acceptable mass spectral identification with "J", using professional judgement, and non-detected analytes as unusable (R).

The RRF's and the average RRF for the IC dated 11 18 03 were within the acceptance criteria specified in the method for all target analytes with the exception of Acetone and 2-Butanone. As per the National Functional Guidelines, if any initial calibration RRF is less than 0.05, qualify positive results that have acceptable mass spectral identification with "J", using professional judgement, and non-detected analytes as unusable (R).

B. Continuing Calibration

Two CC's dated 11/17/03 and 11'18'03 were analyzed on instrument MSV2 in support of the volatile sample analyses reported in the data submissions.

The percent difference (%D) between the average RRF's and the CC RF's were within the acceptance criteria for all target analytes. The CC RRF's were within the acceptance criteria specified in the method for all target analytes with the exception of Acetone and 2-Butanone. The Acetone and 2-Butanone results were previously qualified under section 3A above.

4. BLANKS

Two laboratory volatile method blanks, a storage blank, a Trip Blank, and a Field Blank were analyzed with this SDG. The results are summarized below:

Method Blanks

1117V2BLK01 (11/17/03)

Methylene chloride was detected at a concentration of 0.14 ppb in the method blank analyzed on 11/17/03.

1118V2BLK01 (11/18/03)

There was no target analytes detected in the method blank analyzed on 11/18/03.

Storage Blank (VHBLK01)

There was no target analytes detected in the storage blank.

Trip Blank (SKGWTB1008)

Sulfur dioxide was detected at a concentration of 311 ppb in the Trip Blank dated 11/13/03.

Field Blank (SKSWFB1008)

Benzene (0.18 ppb), Ethylbenzene (0.063 ppb), Carbon disulfide (0.34 ppb) Methylene chloride (1.6 ppb), Toluene (0.82 ppb), and Xylenes (0.38 ppb) were detected in the Field Blank collected on 11/13/03. The Methylene chloride detected in the Field Blank collected on 11/13/03 was mitigated by the presence of Methylene chloride in the associated method blank. Sulfur dioxide was detected (as a Tentatively Identified Compound TIC) in the Field Blank at a concentration of 205 ppb.

5. SYSTEM MONITORING COMPOUND RECOVERY

All reported volatile system monitoring compounds were recovered within acceptable control limits for all samples.

6. MATRIX SPIKE/MATRIX SPIKE DUPLICATE

Sample SKSW511008 was submitted for MS/MSD analysis. The percent recoveries and RDP between the MS/MSD were within the acceptance limits. A matrix spike/matrix spike duplicate is not required when analyzing samples under the CLP SOW OLC02.0

7. LABORATORY CONTROL SAMPLE

Two LCS were analyzed in conjunction with this SDG. Recoveries were within the control limit for all constituents.

8. INTERNAL STANDARDS PURFORMANCE

Internal Standard areas and retention times were within acceptable limits for the reported volatile sample analyses.

9. COMPOUND IDENTIFICATION

All reported VOCs were correctly identified with supporting chromatograms present in the data package.

10. CONSTITUENT QUANTITATION AND REPORTED DETECTION LIMITS

Constituent quantitations were correctly calculated and reported for VOCs.

11. SYSTEM PERFORMANCE

The analytical system appears to have been working well at the time of these analyses, based on the evaluation of the raw data.

12. DOCUMENTATION

The documentation appeared accurate and in order.

13. OVERALL ASSESSMENT

The results are acceptable with the validator-added qualifiers. It should be noted that the field blank contained detectable quantities of petroleum related analytes although the constituents were not detected in any of the associated surface water samples, therefore no action was taken.

DATA VALIDATION SUMMARY - SAMPLE DELIVERY GROUP 203111413 PESTICIDES

Validation of the Gas Chromatography (GC) pesticides data, as prepared by Gulf Coast Analytical Laboratories (GCAL) for the samples collected from the Skinner Landfill site in November 2003, was conducted by Earth Tech using the National Functional Guidelines for Organic Data Review, (US EPA, October, 1999), as appropriate. These data were reported by GCAL under SDG 203111413.

GCAL#	Sample Description
203111413-01	SKSW511008
203111413-02	SKSW511008 MS
203111413-03	SKSW511008 MSD
203111413-05	SKSWFB1008
203111413-06	SKSW521008
203111413-07	SKSW531008

INTRODUCTION

Analyses were performed according to CLP-Organic Analysis Multi-Media, Multi-Concentration OLM04.2 SOW. Results of the sample analyses are reported by the laboratory as either qualified or unqualified. Unqualified results mean that the reported values may be used without reservation. Various qualifier codes are used by the laboratory to denote specific information regarding the analytical results.

The data validation process is intended to evaluate the data on a technical basis. The data package also was subjected to an internal laboratory quality review prior to submission to Earth Tech for data validation.

During the validation process, laboratory-qualified and unqualified data are verified against all available supporting documentation. Based on this evaluation, qualifier codes may be added, deleted or modified by the data user. Final results are therefore, either qualified or unqualified. Validator-qualified results are annotated with the following codes in accordance with the Functional Guidelines:

- U The constituent was analyzed for, but was not detected above the level of the associated analytical reporting limit. The associated value is either the sample quantitation limit or the sample detection limit.
- J The analyte was positively identified; the associated numerical value is the approximate concentration of the analyte in the sample.
- UJ The analyte was not detected above the reported sample quantitation limit. However, the reported quantitation limit is approximate and may or may not represent the actual limit of quantitation necessary to accurately and precisely measure the analyte in the sample.

R The sample results are rejected due to serious deficiencies in the ability to analyze the sample and meet quality control criteria. The presence or absence of the analyte cannot be verified.

Details of the pesticide data validation findings and conclusions are provided in the following sections of this report:

- 1. Holding Times
- 2. Gas Chromatograph Electronic Capture Detector (GC/ECD) Instrument Performance Check
- 3. IC
- 4. Calibration Verification
- Blanks
- 6. Surrogate Spikes
- 7. Matrix Spike Matrix Spike Duplicate (MS/MSD)
- 8. **Pesticide** Cleanup Checks
- 9. Target Compound Identification
- 10. Constituent Quantitation and Reported Detection Limits
- 11. Documentation
- 12. Overall Assessment

1. HOLDING TIMES

All samples were extracted within the seven-day technical holding time and the five-day VTSR method holding time. The cooler temperature upon receipt at the laboratory was within the recommended temperature of $4^{\circ}C^{-\frac{1}{2}} - 2^{\circ}C$.

2. GC/ECD INSTRUMENT PERFORMANCE CHECK

The Performance Evaluation Mixture (PEM) was analyzed at the correct frequency. Absolute retention times were within limits.

The percent resolution between adjacent peaks was within QC limits for the Pesticide Analyte Resolution Check with the exception of Endosulfan sulfate analyzed 12/01/03 on the confirmation column. The percent resolution between adjacent peaks is within QC limits for the Performance Evaluation Mixtures (PEM). The percent breakdown for both 4,4-DDT and Endrin in each PEM was less than 20.0% for both GC columns. The combined percent breakdown for 4,4-DDT and Endrin in each PEM was less than 30.0% for both GC columns.

3. INITIAL CALIBRATION

Individual standard mixtures A and B were analyzed at the correct frequencies and concentrations. The percent resolution criterion was met for Individual standard mixtures A and B.

The Percent Relative Standard Deviation (%RSD) of the calibration factors for each of the single component pesticides was less than 20%.

The multi-component target compounds were analyzed separately on both columns at a single concentration level. Retention times were determined from a minimum of three peaks.

4. CALIBRATION VERIFICATION

Absolute retention times were within appropriate time retention windows

5. BLANKS

One laboratory method blank was analyzed with this SDG. The results are summarized below.

Method Blank 130964

No constituents were detected above the laboratory-reporting limit. This blank corresponds to all samples extracted on 11/18/03.

6. SURROGATE SPIKES

Decachlorobiphenyl (DCB) and tetrachloro-m-xylene (TCX) surrogate spike recoveries were within the acceptance criteria for all samples.

7. MATRIX SPIKE/MATRIX SPIKE DUPLICATE

Sample SKSW511008 was used for the matrix spike/matrix spike duplicate sample. The MS/MSD percent recoveries were within the acceptance criteria with the exception of gamma-BHC. The RPD between the MS and MSD were within the acceptance criteria. As per the National Functional Guidelines, no action is taken on MS/MSD data alone.

8. **PESTICIDE CLEANUP CHECKS**

Recoveries of all pesticides and surrogates were within 80-120% for the lot of Florisil cartridges utilized for pesticide cleanup.

9. TARGET COMPOUND IDENTIFICATION

All reported pesticide data were correctly identified with supporting chromatograms present in the data package.

10. CONSTITUENT QUANTITATION AND REPORTED DETECTION LIMITS

Constituent quantitations were correctly calculated and reported for pesticide constituents.

11. DOCUMENTATION

The documentation appeared accurate and in order.

12. OVERALL ASSESSMENT

The results are acceptable with the validator-added qualifiers.

REFERENCES

US EPA, 1994. National Functional Guidelines for Inorganic Data Review.

US EPA, 1999. National Functional Guidelines for Organic Data Review.



ANALYTICAL RESULTS

PERFORMED BY

GULF COAST ANALYTICAL LABORATORIES, INC.

Report Date 12/02/2003

GCAL Report 203111413 _

Deliver To Earth Tech 200 Vine Street Wilder, KY 41076 859-442-2300

Attn Pat Higgins

Customer Earth Tech

Project Skinner Landfill

000001

CASE NARRATIVE

Client: Earth Tech Report: 203111413

Gulf Coast Analytical Laboratories received and analyzed the sample(s) listed on the sample cross-reference page of this report. Receipt of the sample(s) is documented by the attached chain of custody. This applies only to the sample(s) listed in this report. No sample integrity or quality control exceptions were identified unless noted below.

SEMI-VOLATILES MASS SPECTROMETRY

In the semi-volatile analysis, 4-Nitrophenol was recovered above the QC limits in the MS/MSD. 2,4-Dinitrotoluene was slightly above in the QC limit in the MSD.

SEMI-VOLATILES GAS CHROMATOGRAPHY

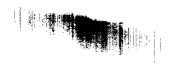
In the Pesticide analysis of the MS/MSD, the spike recovery for gamma-BHC was below QC limits. This is attributed to matrix interference.

In the analysis of RESC01 (resolution check), Methoxychor and Endosulfan Sulfate were not resolved on the confirmation column, however all compounds were resolved on the initial column.

METALS

In the ILM04.1 - CLP Metals analysis for prep batches 265578 and 265580, the MS recovery was outside the control limits for Selenium. The LCS recovery was within control limits. This indicates the analysis is in control and the sample is affected by matrix interference. A post-digestion spike was performed on the QC sample for this batch with a recovery of 0%.

Zinc is flagged with an "*" for samples associated with prep batch 265580 due to the fact that the absolute difference between the original sample result and the duplicated result is greater than the CRDL, and the sample and/or duplicate result is between the CRDL and 5X the CRDL.



Laboratory Endorsement

Sample analysis was performed in accordance with approved methodologies provided by the Environmental Protection Agency or other recognized agencies. The samples and their corresponding extracts will be maintained for a period of 30 days unless otherwise arranged. Following this retention period the samples will be disposed in accordance with GCAL's Standard Operating Procedures.

Common Abbreviations Utilized in this Report

ND Indicates the result was Not Detected at the specified RDL

DO Indicates the result was Diluted Out

MI Indicates the result was subject to Matrix Interference TNTC Indicates the result was Too Numerous To Count

SUBC Indicates the analysis was Sub-Contracted

FLD Indicates the analysis was performed in the Field

PQL **Practical Quantitation Limit** MDL Method Detection Limit RDL Reporting Detection Limit

00:00 Reported as a time equivalent to 12:00 AM

Reporting Flags Utilized in this Report

Indicates an estimated value

U Indicates the compound was analyzed for but not detected

В (ORGANICS) Indicates the analyte was detected in the associated Method Blank

B (INORGANICS) Indicates the result is between the RDL and MDL

Sample receipt at GCAL is documented through the attached chain of custody. In accordance with ISO Guide 25 and NELAC, this report shall be reporduced only in full and with the written permission of GCAL. The results contained within this report relate only to the samples reported. The documented results are presented within this report.

This report pertains only to the samples listed in the Report Sample Summary and should be retained as a permanent record thereof. The results contained within this report are intended for the use of the client. Any unauthorized use of the information contained in this report is prohibited.

I certify that this data package is in compliance with the terms and conditions of the contract and Statement of Work both technically and for completeness, for other than the conditions in the case narrative. Release of the data contained in this hardcopy data package and in the computer-readable data submitted has been authorized by the Quality Assurance Manager or his/her designee, as verified by the following signature.

SCOTT A. BAILEY OPERATIONS MANAGER) **GCAL REPORT 203111413**

Report Sample Summary

	GCAL ID	Client ID	Matrix	Collect Date/Time	Receive Cate/Time
5650	20311141301	SK SW511 008	Water	11/13/2003 11:15	11/14/2003 09:30
<i>''</i>	20311141302	SKSW511008 MS	Water	11/13/2003 11:22	11/14/2003 09:30
U	20311141303	SKSW511008 MSD	Water	11/13/2003 11:40	11/14/2003 09:30
11	20311141304	SKSW511008 DUP	Water	11/13/2003 11:40	11/14/2003 09:30
,.	20311141305	SKSWFB1008	Water	11/13/2003 12:45	11/14/2003 09:30
5W51	20311141306	SKSW521008	Water	11/13/2003 11:55	11/14/2003 09:30
-w52	20311141307	SKSW531008	Water	11/13/2003 12:12	11/14/2003 09:30
5w50	20311141308	SKSW511008 (DISS)	Water	11/13/2003 11:15	11/14/2003 09:30
6	20311141309	SKSW511008 MS (DISS)	Water	11/13/2003 11:22	11/14/2003 09:30
, ,	20311141310	SKSW511008 DUP (DISS)	Water	11/13/2003 11:40	11/14/2003 09:30
	20311141311	SKSWFB1008 (DISS)	Water	11/13/2003 12:45	11/14/2003 09:30
3W51	20311141312	SKSW521008 (DISS)	Water	11/13/2003 11:55	11/14/2003 09:30
	20311141313	SKSW531008 (DISS)	Water	11/13/2003 12:12	11/14/2003 09:30



	77.EDF	34%	NALKS SIDATA S	HEET 3050			
Las Name:	GCAL		Sample Dr. Sr.	_			
	LA024 Case No		Contract:				
Matrix: Water			\$4\$ No. SDG No.: 203111413				
Sample wt/vol; 25 Units: mL						· · · · · · · · · · · · · · · · · · ·	
Level: (low/m			Lab File (D: 20 3				
·	not dec.		Date Collected:			115	
GC Column:	DB-624-30M iD: 53	(mm)					
Instrument IC): <u>MSV2</u>		Date Analyzed:	11/17/03	Time: _1	417	
Concentrated	Il Extract Volume:	(µL)	Dilution Factor:	1	Analyst	RSP	
Soil Aliquot V	/olume:	(µL)	Prep Method:				
			Analytical Method		1 - CLP Vo		
CONCENT	RATION UNITS: Ug/L		•	 -			
CAS NO.	. COMPOUND		RESULT	Q	RL		
71-55-6	1,1,1-Trichloroethane		1.0	U	1.0	1	
79-34-5	1,1,2,2-Tetrachioroethane		10	U	1.0	1	
79-00-5	1,1,2-Trichloroemane		. 0	Ü	1.0	1	
75-34-3	1,1-Dichloroethane		• 0	U	1.0	1	
75-35-4	1,1-Dichloroethene		· C	U	1.0	1	
120-82-1	1,2,4-Trichloropenzene		1.0	U	1.0	1	
106-93-4	1,2-Dibromoethane		.0	U	1.0	1	
95-50-1	1,2-Dichlorobenzene		: C	U	1.0]	
107-06-2	1,2-Dichloroethane	_	: 0	υ	1.0		
540-59-0	1,2-Dichloroethene		·c	U	1.0	Ì	
78-87-5	1,2-Dichloropropane			U	1.0]	
541-73-1	1,3-Dichlorobenzene		1.0	υ	1.0		
106-46-7	1,4-Dichloropenzene			U	1.0]	
78-93-3	2-Butanone		5.0	IJ	5.0]	
591-78-6	2-Hexanone		5.0	U	5.0	[R	
108-10-1	4-Methyl-2-pentanone		5.0	U	5.0] _	
67-64-1	Acetone		5.0	U	5.0	<i>R</i>	
71-43-2	Benzene		1 0	U	1.0	}	
75-27-4	Bromodichlorometrane		1 0	U	1.0		
75-25-2	Bramoform		10	Ü	1.0		
74-83-9	Bromomethane			υ	1.0		
75-15-0	Carbon disulfde		• 0	U	1.0		
56-23-5	Carbon tetrachionde		- 5	Ü	1.0		
108-90-7	Chlorobenzere		1.0	U	1.0		
75-00-3	Chioroethane		7.0	U	1.0		
67-66-3	Chloroform		1 3	U	1.0		
74-87-3	Chloromethane		• 0	U	1.0		
124-48-1	Dibromochloromethare		1:	ن	1.0		
10061-01-5	cis-1,3-Dichlorocropene		- 3	Ü	1.0		
10061-02-6	trans-1,3-Dichloropropene			U	1.0		
100-41-4	Ethylbenzene		10	U	1.0		

113/04

2.0

U

U

2.0

1.0

75-09-2

100-42-5

Methylene chloride

1A VOLATILE ORGANICS ANALYSIS DATA SHEET

Lab Name: GCAL Sample ID: SKSW511008 Case No.: Lab Code: LA024 Contract: ____ SDG No.: 203111413 Matrix: Water SAS No.: Sample wt/vol: 25 Units: mL Lab Sample ID: 20311141301 Lab File ID: 2031117/T0540 Level: (low/med) Date Collected: 11/13/03 Time: 1115 % Moisture: not dec. GC Column: DB-624-30M ID: .53 (mm) Date Received: 11/14/03 Instrument ID: MSV2 Date Analyzed: 11/17/03 Time: 1417 Concentrated Extract Volume: (µL) Dilution Factor: 1 Analyst: RSP Soil Aliquot Volume: Prep Method: (µL) Analytical Method: OLC02.1 - CLP Vo CONCENTRATION UNITS: ug/L

CAS NO	. COMPOUND	RESULT	Q	RL
127-18-4	Tetrachloroethene	1.0	U	1.0
108-88-3	Toluene	1.0	U	1.0
79-01-6	Trichloroethene	1.0	U	1.0
75-01-4	Vinyl chloride	1.0	U	1.0
1330-20-7	Xylene (total)	1.0	υ	1.0



VOLATILE ORGANIOS ANALYSIS DATA SHEET TENTATIVELY DENTIFIED COMPOUNDS

SAMPLE NO.

SKSW511008 SW56

_ab Name: GCAL	^^	ntract		<u></u>		~50
	se No.:	-	SAS No	SDG	G No.: 203	111413
Matrix: Water			Lab Sample ID:	20311141301		
tample wt/vol: Units			Lab File D: 200	3111 7/T0540		
.evel: (low/med)			Date Collected:	11/13/03	Time: 1	115
6 Moisture: not dec.			Date Received:	11/14/03	— 	
GC Column: <u>D8-624-30M</u>	ID: .53	(mm)	Date Analyzed:	11/17/03	Time: 1	417
nstrument ID: MSV2			Dilution Factor:	1	Analyst	RSP
oil Extract Volume:	<u> </u>	(pL)				
Soil Aliquot Volume:		(µL)				
Number TICs Found: 1						
CONCENTRATION UNITS						
CAS NO. COMPOUR	ND		RT	EST. CO	NC.	Q
1. 7446-09-5 Sulfur dicoice			146	116		

ستمع کورار

VOLATILE ORGANICS ANALYSIS DATA SHEET

Lab Name: GCAL Lab Code: LA024 Case No.:			Sample ID: SKSWFB1008 Contract:				
Sample wt/vol: 25 Units: mL			Lab Sample ID:	20311141	305		
Level: (low/n	ned)		Lab File ID: 203	31118P/T05	590		
% Moisture: not dec.			Date Collected: 11/13/03 Time: 1245				
	DB-624-30M ID: .53					<u></u>	
Instrument if	D: MSV/2					2358	
	dl Extract Volume:		Date Analyzed: 11/18/03 Time: 2358 Dilution Factor: 1 Analyst: HJL				
Soil Aliquot \	 			<u> </u>	, wilding 01		
Soil Allquot	Volume:	— (μc)	Prep Method: _				
CONCENT	FRATION UNITS: ug/L		Analytical Method	d: <u>OLC02</u>	2.1 - CLP Vo		
CAS NO	. COMPOUND		RESULT	Q	RL.		
71-55-6	1,1,1-Trichloroethane		1.0	υ	1.0	7	
79-34-5	1,1,2,2-Tetrachloroethane		1.0	U	1.0	1	
79-00-5	1,1,2-Trichloroethane		1.0	U	1.0		
75-34-3	1,1-Dichloroethane		1.0	υ	1.0	1	
75-35-4	1,1-Dichloroethene		1.0	U	1.0		
120-82-1	1,2,4-Trichlorobenzene		1.0	U	1.0	7	
106-93-4	1,2-Dibromoethane		1.0	U	1.0	1	
95-50-1	1,2-Dichlorobenzene		1.0	U	1.0	1	
107-06-2	1,2-Dichloroethane		1.0	U	1.0	1	
540-59-0	1,2-Dichloroethene		1.0	U	1.0	1	
78-87-5	1,2-Dichloropropane		1.0	U	1.0	1	
541-73-1	1,3-Dichlorobenzene		1.0	U	1.0	1	
106-46-7	1,4-Dichlorobenzene		1.0	U	1.0	1	
78-93-3	2-Butanone		5.0	U	5.0	R	
591-78-6	2-Hexanone		5.0	U	5.0	1	
108-10-1	4-Methyl-2-pentanone		5.0	U	5.0	1	
67-64-1	Acetone	·· · · ·	5.0	U	5.0	R	
71-43-2	Benzene		0.18	J	1.0	1	
75-27-4	Bromodichloromethane		1.0	U	1.0	1	
75-25-2	Bromoform		1.0	U	1.0	1	
74-83-9	Bromomethane		1.0	U	1.0		
75-15-0	Carbon disulfide		0.34	J	1.0		
56-23-5	Carbon tetrachloride		1.0	U	1.0		
108-90-7	Chlorobenzene		1.0	U	1.0		
75-00-3	Chloroethane		1.0	υ	1.0		
67-66-3	Chloroform		1.0	U	1.0		
74-87-3	Chloromethane		1.0	U	1.0		
124-48-1	Dibromochloromethane		1.0	U	1.0		
10061-01-5	cis-1,3-Dichloropropene		1.0	U	1.0		
10061-02-6	trans-1,3-Dichloropropene		1.0	U	1.0		
100-41-4	Ethylbenzene		0.063	J	1.0		
75-09-2	Methylene chloride		1.6	j	2.0		
100-42-5	Styrene		1.0	U	1.0	l	
							

1/13/04

74 COLATTLE OR SAN OS ANALNS SIDATIS SHEET.

Lab Name: GCAL	Sample D SKSWFB1008				
Lab Code: LA024 Case No.:	Contract:				
Matrix: Water	SAS No: SDG No.: 203111413				
Sample wt/vol: 25 Units: mt.	Lab Sample ID: 20311141305				
Level: (low/med)	Lat File D: 2031118P/T0590				
% Moisture: not dec.	Date Collected: 11/13/03 Time: 1245				
GC Column: <u>DB-624-30M</u> (D:53 (n	m) Date Received: 11/14/03				
Instrument ID: MSV2	Date Analyzed: 11/18/03 Time: 2358				
Concentrated Extract Volume: ()	L) Dilution Factor: 1 Analyst: HJL				
Sail Aliquot Volume: ()	L) Prep Method:				
CONCENTRATION UNITS: Ug/L	Analytical Method: OLC02.1 - CLP Vo				
CAS NO. COMPOUND	RESULT Q RL				
127-18-4 Tetrachloroethene	1.0 U 1.0				
106-88-3 Toluene	0.82 J 1.0				
79-01-6 Trichloroethene	1.3 U 1.0				
75-01-4 Vinyl chlonde	1.C U 1.0				
1330-20-7 Yulene (Intal)	0.38 ! 1.0				

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VOLATILE ORGANICS ANALYSIS DATA SHEET TENTATIVELY IDENTIFIED COMPOUNDS

SAMPLE NO.	
SKSWFB1008	

Lab Name: GCAL	_Contract: .	<u> </u>		
Lab Code: LA024 Case No.:		SAS No.:	SDG No	.: 203111413
Matrix: Water		Lab Sample ID:	20311141305	
Sample wt/vol: Units:		Lab File ID: 20	31118P/T0590	
Level: (low/med)		Date Collected:	11/13/03 T	ime: 1245
% Moisture: not dec.		Date Received:	11/14/03	
GC Column: DB-624-30M ID: .53	(mm)	Date Analyzed:	11/18/03 T	ime: 2358
Instrument ID: MSV2		Dilution Factor:	<u>1</u> A	Analyst: HJL
Soil Extract Volume:	(µL)			
Soil Allquot Volume:	(µL)			
Number TICs Found: 1				
CONCENTRATION UNITS:				
CAS NO. COMPOUND		RT	EST. CONC.	. Q
1 . 7446-09-5 Sulfur dioxide		1:464	205	

VOLATILE OF LAW OF FLYS FOATA SHEET

Lib Name:	GCAL	Sample 0 Se	(SW521008	
Lab Code:	LA024 Case %3 :	Contract		
Matrix: Wa				SDG No.: 203111413
Sample wt/v	olt 25 Units: mil.	Lab Sample (D:	<u> </u>	
Level: (lowr		Lab File ID: 20	31118P/T0591	
% Moisture:	not dec.	Date Collected:	11/13/03	Time: 1155
GC Column:	: D8-624-30M ID: 53 (mm)	Date Received:	11/14/03	
Instrument I	D: MSV2	Date Analyzed:	11/19/03	Time: 0023
Concentrate	di Extract Volume: (µL)	Dilution Factor:	1	Analyst HJL
Soil Aliquot	Volume: (µL)	Prep Method:		
CONCENT	TRATION UNITS. Ug/L	Analytical Metho	d: OLC02.1	- CLP Vo
	·	05044.7	•	24
	. COMPOUND	RESULT		RL.
71-55-6	1,1,1-Trichloroetrane	1.3	U	1.0
79-34-5	1,1,2,2-Telrach-croethane	1.3	U	1.0
79-00-5	1,1,2-Trichloroethane	10	U	1.0
75-34-3	1,1-Dichloroethane	1	U	1.0
75-35-4	1,1-Dichloroethene 1,2,4-Trichlorocenzene	1.0	U	1.0
106-93-4	1.2-Dibromoethane	10	U	1.0
95-50-1	1.2-Dichlorobenzere	- 5	l u l	1.0
107-06-2	1.2-Dichloroethane	1.0	U	1.0
540-59-0	1.2-Dichloroethene	• 5	U	1.0
78-87-5	1,2-Dichloropropane	1.0	U	1.0
541-73-1	1,3-Oichlorobenzene	1.0	U	1.0
106-46-7	1,4-Oichlorobenzene	1.5	U	1.0
78-93-3	2-Butanone	5.0	U	5.0 R
591-78-6	2-Hexanone	5.0	U	5.0
108-10-1	4-Methyl-2-pentanone	5.0	 U	5.0
67-64-1	Acetone	5.0	U	5.0 R
71-43-2	Benzene		U	1.0
75-27-4	Bromodichloromethane	• ;	U	1.0
75-25-2	Bromoform	3.0	Ü	1.0
74-83-9	Bromomethane	1.0	U	1.0
75-15-0	Carbon disulfice	1.0	U	1.0
56-23-5	Carbon tetrachionde	1.0	บ	1.0
106-90-7	Chlorobenzene	•.0		1.0
75-00-3	Chloroethane	1,0	U	1.0
67-66-3	Chloroform	• (U	1.0
74-87-3	Chloromethane	1.0	บ	1.0
124-48-1	Dibromochloromethane	1.€	IJ	1.0
10061-01-5	dis-1,3-Dich oroprocene	1.0	Ü	1.0
10061-02-6	trans-1,3-Dichloropropene	1.0	U	1.0
100-41-4	Ethylbenzene	1.3	U	1.0
75-09-2	Methylene chlonce	2.0	U	2.0
100.42-5	Shrene	+ 1	11	10

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1A VOLATILE ORGANICS ANALYSIS DATA SHEET SW 51

Lab Name: GCAL	Sample ID: SKSW521008
Lab Code: LA024 Case No.:	Contract:
Matrix: Water	SAS No.: SDG No.: 203111413
Sample wt/vol: 25 Units: mL	Lab Sample ID: 20311141306
Level: (low/med)	Lab File ID: 2031118P/T0591
% Moisture: not dec.	Date Collected: 11/13/03 Time: 1155
GC Column: DB-624-30M ID: .53 (mm)	Date Received: 11/14/03
Instrument ID: MSV2	Date Analyzed: 11/19/03 Time: 0023
Concentratedi Extract Volume: (µL)	Dilution Factor: 1 Analyst: HJL
Soil Aliquot Volume: (µL)	Prep Method:
CONCENTRATION UNITS: ug/L	Analytical Method: OLC02.1 - CLP Vo
CAS NO. COMPOUND	RESULT Q RL
127-18-4 Tetrachloroethene	1.0 U 1.0
108-88-3 Toluene	1.0 U 1.0
79-01-6 Trichloroethene	1.0 U 1.0
75-01-4 Vinyl chloride	1.0 U 1.0
1330-20-7 Xylene (total)	1.0 U 1.0

VOLATILE DRIGANIOS ANALYSIS DATA SHEET

TENTATIVELY TENT FIED COMPOUNDS

SAMPLE NO.

SKSW521006

Lab Name: GCAL	Contract:				: w Z /	
Lab Code: LA024 Case No.:		S4S No.:		 SDG No.: <u>20</u>	3111413	
Matrix: Water		Lab Sample ID:	2031114130	6		
Sample wt/vol: Units		Lab File (D: 20	3111 8 P/ T059 1	<u> </u>		
Level: (low/med)	<u> </u>	Date Collected:	11/13/03	Time:	1155	
% Moisture: not dec.		Date Received:	11/14/03			
GC Column: DB-624-30M iD: .5	(mm)	Date Analyzed:	11/19/03	Time:	0023	
instrument ID: MSV2		Dilution Factor:	1	Analysi	: HJL	
Soil Extract Volume:	(µL)					
Soil Aliquot Volume:	(µL)					
Number TICs Found: 1						
CONCENTRATION UNITS						
CAS NO. COMPOUND		RT	EST.	CONC.	Q	
1 7446-09-5 Suffer director		1 465	1	255		

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VOLATILE ORGANICS ANALYSIS DATA SHEET

Lab Name:	GCAL	Sample ID: SKSW531008				
Lab Code:	LA024 Case No.:	Contract:				
Matrix: Wa	ater	SAS No.: SDG No.: 203111413				
Sample wt/v	ol: 25 Units: mL	Lab Sample ID;	20311141	307		
Level: (low/n	ned)	Lab File ID: 20	31118P/T0	592		
	not dec.	Date Collected:	11/13/03	Time:	1212	
	DB-624-30M iD: .53 (mm)	Date Received:	11/14/03			
	D: MSV2	Date Analyzed:	11/19/03	Time:	0047	
	di Extract Volume: (μL)			Analyst:	HJL	
	/olume: (μL)	Prep Method:		_		
		Analytical Metho		2.1 - CLP Vo	· · · · · · · · · · · · · · · · · · ·	
CONCENT	RATION UNITS: ug/L	,				
CAS NO	. COMPOUND	RESULT	Q	. RL		
71-55-6	1,1,1-Trichloroethane	1.0	T U	1.0	7	
79-34-5	1,1,2,2-Tetrachloroethane	1.0	Ų	1.0	7	
79-00-5	1,1,2-Trichloroethane	1.0	U	1.0	7	
75-34-3	1,1-Dichloroethane	1.0	U	1.0	7	
75-35-4	1,1-Dichloroethene	1.0	U	1.0	1	
120-82-1	1,2,4-Trichlorobenzene	1.0	U	1.0	7	
106-93-4	1,2-Dibromoethane	1.0	U	1.0	7	
95-50-1	1,2-Dichlorobenzene	1.0	U	1.0		
107-06-2	1,2-Dichloroethane	1.0	U	1.0		
540-59-0	1,2-Dichloroethene	1.0	Ü	1.0	1	
78-87-5	1,2-Dichloropropane	1.0	U	1.0	7	
541-73-1	1,3-Dichlorobenzene	1.0	U	1.0	7	
106-46-7	1,4-Dichlorobenzene	1.0	U	1.0	7	
78-93-3	2-Butanone	5.0	U	5.0	7 R	
591-78-6	2-Hexanone	5.0	U	5.0	7	
108-10-1	4-Methyl-2-pentanone	5.0	U	5.0	7	
67-64-1	Acetone	5.0	U	5.0	R	
71-43-2	Benzene	1.0	U	1.0		
75-27-4	Bromodichloromethane	1.0	U	1.0]	
75-25-2	Bromoform	1.0	U	1.0]	
74-83-9	Bromomethane	1.0	U	1.0]	
75-15-0	Carbon disulfide	1.0	U	1.0		
56-23-5	Carbon tetrachloride	1.0	U	1.0]	
108-90-7	Chlorobenzene	1.0	U	1.0]	
75-00-3	Chloroethane	1.0	U	1.0		
67-66-3	Chloroform	1.0	U	1.0	_	
74-87-3	Chloromethane	1.0	U	1.0	J	
124-48-1	Dibromochloromethane	1.0	U	1.0	1	
	cis-1,3-Dichloropropene	1.0	U	1.0]	
	trans-1,3-Dichloropropene	1.0	U	1.0]	
100-41-4	Ethylbenzene	1.0	U	1.0	1	
75-09-2	Methylene chloride	2.0	Ü	2.0]	
100-42-5	Styrene	1.0	U	1.0	i	

VOLATILE DRIGANICO ANALIAS SINATA SHEETI NOMES SA

Lab Name: GCAL Sample D | SKS N531008 Lab Code: LA024 Case No. Contract ____ SAS No.: SDG No.: 203111413 Matrix: Water Sample wi/vot: 25 Units Implication Lab Sample D: 20311141307 Lab File ID: 2031118P/T0592 Level: (low/med) Date Collected: 11/13/03 Time: 1212 % Moisture: not dec. GC Column: D8-624-30M ID: 53 (mm) Date Received: 11/14/03 Instrument ID: MSV2 Date Analyzed: 11/19/03 Time: 0047 Concentrated Extract Volume: (µL) Dilution Factor: 1 Analyst: HJL Soil Aliquot Volume: (µL) Prep Method: Analytical Method: OLC02.1 - CLP Vo CONCENTRATION UNITS: Upt. CAS NO. COMPOUND RESULT Q RL 127-18-4 Tetrachloroethene • 0 1.0 U 106-88-3 Toluene U 1.0 79-01-6 Trichloroethene ٦.٢ Ū 1.0 75-01-4 Vinyl chlande Ū 1.0 1330-20-7 Xylene (total) 1.0

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VOLATILE ORGANICS ANALYSIS DATA SHEET TENTATIVELY IDENTIFIED COMPOUNDS

SAMPLE NO.	
SK\$W531008	

Lab Name:	GCAL		Contract:		<u> </u>	5	W 52
Lab Code:	LA024	Case No.:	·····	SAS No.:	SDC	No.: 20	3111413
Matrix: W	ater			Lab Sample ID:	20311141307	,	
Sample wt/v	/ol:	Units:		Lab File ID: 20	31118P/T0592		
Level: (low/r	med)			Date Collected:	11/13/03	Time:	1212
% Moisture:	not dec.			Date Received:	11/14/03		
GC Column	: DB-624-30M	ID: .53	(mm)	Date Analyzed:	11/19/03	. Time:	0047
Instrument I	D: MSV2			Dilution Factor:	1	Analyst	: HJL
Soil Extract	Volume:		(µL)				
Soil Aliquot	Volume:	·····	(µL)				
Number	TICs Found: 1	,					
CONCE	NTRATION UNIT	S:					
CASA	IO. COMI	POUND		RT	EST. CO	NC.	Q
1 . 7446-09	-5 Sulfur dioxid	de		1.464	179		

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Lab Name:	GCAL	Samble D.	SKSW51100	3	
	LA024 Case No.:	Contract:			
Matrioc: W	- Inter			SDG No.:	203111413
_					
	vol: 1000 Units: mil.	Lad Samble	J: 20311141	1301 Lab F0	e ID: 2031126/S
Level: (fow	imed)	Date Collecte	d: <u>11/13/03</u>	Time:	1115
% Moisture	decanted: (Y/N)	Date Receive	d: <u>11/14/03</u>		
GC Column	ic DB-5MS-30M iD: 25 (mm)	Date Analyze	d: 11/26/03	Time:	2112
Concentrate	ed Sample Volume: 1000 (µL)	Dilution Facto	or. <u>1</u>	Analy	st: RLW
Soil Aliquot	Volume: (µL)	Prep Method:			
	itume: 2 (uL)				
		nstrument ID			•
CONCENT	RATION UNITS: ug/L				
CAS NO.	COMPOUND	RESULT	Q	RL	
95-95-4	2,4,5-Trichloropne*a	0.C*	U	10.0	1
88-06-2	2,4,6-Trichlorophens	10.0	U	10.0	1
120-83-2	2,4-Dichlorophena	10.0	Ü	10.0	
51-28-5	2.4-Dinitrophenol	25.0	U	25.0	ius -
121-14-2	2,4-Dinitrotoluene	10.0	U	10.0	1
606-20-2	2,6-Dinitrotoluene	10.0	U	10.0	1
91-58-7	2-Chloronaphthaiere	10.0	U	10.0	
95-57-8	2-Chlorophenoi	10.0	U	10.0	1
91-57-6	2-Methylnaphthalene	10.0	l u	10.0	1
88-74-4	2-Nitroanline	25.0	U	25.0	1
88-75-5	2-Nitrophenol	-0.0	U	10.0	1
91-94-1	3.3-Dichlorobenziane	10.0	U	10.0	1
99-09-2	3-Nitroantine	25.0	U	25.0	1
534-52-1	2-Methyl-4,6-dinitrophenal	25.0	Ü	25.0	1
59-50-7	4-Chioro-3-methytonenox	10.0	Ü	10.0	1
106-47-8	4-Chloroaniline	10.0	U	10.0	1R
7005-72-3	4-Chiorophenyi-pnenyiether	10.0	U	10.0	1
106-44-5	4-Methylphenol (p-Cresol)	10.0	Ü	10.0	1
83-32-9	Acenaphthene	• • • • • • • • • • • • • • • • • • • •	U T	10.0	{
208-96-8	Acenaphthylene	10.0	U	10.0	
120-12-7	Anthracene	• • • • • • • • • • • • • • • • • • • •	Ü	10.0	
56-55-3	Benzo(a)anthracene	.0.0	u	10.0	1
50-32-8	Benzo(a)pyrene	10.0	Ü	10.0	
205-99-2	Benzo(b)fluoranthene	.30	Ü	10.0	
191-24-2	Benzo(g,h,i)perylere	100	Ü	10.0	
207-08-9	Benzo(k)fluoranthene	13 0	Ü	10.0	
111-91-1	Bis(2-Chloroethox) methane	100		10.0	
111-44-4	Bis(2-Chloroethy) ether	-30	Ü	10.0	
108-60-1	bis(2-Chloroisoprocy)ether	10.0	Ü	10.0	
117-81-7	bis(2-ethylhexyl)on halate	10.0		10.0	
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SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

			5W5	P			
Lab Name:	GCAL	Sample ID:	SKSW5110				
Lab Code:	LA024 Case No.:	Contract:	Contract:				
Matrix: W	/ater	SAS No.:		SDG No.	: 203111413		
Sample wt/	vol: 1000 Units: mL	Lab Sample	ID: 203111	41301 Lab	File ID: 2031126/5		
Level: (low/	med)	Date Collect	ed: 11/13/0	3 Time	: 1115		
	: decanted: (Y/N)	 Date Receive	ed: 11/14/0				
	n: DB-5MS-30M ID: .25 (mr			3 Tim	e: 2112		
	ed Sample Volume: 1000 (µL			Ana			
				Alla	iyot. INLYY		
	Volume: (µL		:	· · · · · · · · · · · · · · · · · · ·			
Injection Vo	olume: 2 (μL	.) Analytical Me	ethod: OLN	10 4.2			
GPC Clean	up: (Y/N) N pH:	Instrument IC	: MSSV2				
CONCENT	RATION UNITS: ug/L						
CAS NO.	COMPOUND	RESULT	Q	RL			
101-55-3	4-Bromophenyl-phenylether	10.0	U	10.0	7		
85-68-7	Butylbenzylphthalate	10.0	U	10.0	7		
86-74-8	Carbazole	10.0	U	10.0	┪		
218-01-9	Chrysene	10.0	U	10.0	7		
84-74-2	Di-n-butylphthalate	10,01,55	J	10.0	ี นร		
117-84-0	Di-n-octylphthalate	1.15	J	10.0	UZ		
53-70-3	Dibenz(a,h)anthracene	10.0	U	10.0	7		
132-64-9	Dibenzofuran	10.0	Ū	10.0	7		
84-66-2	Diethylphthalate	2.17	J	10.0	71		
131-11-3	Dimethyl-phthalate	10.0	U	10.0	٦ '		
105-67-9	2,4-Dimethylphenol	10.0	U	10.0	7		
206-44-0	Fluoranthene	10.0	U	10.0			
86-73-7	Fluorene	10.0	U	10.0			
118-74-1	Hexachlorobenzene	10.0	U	10.0	7		
87-68-3	Hexachlorobutadiene	10.0	Ü	10.0			
77-47-4	Hexachlorocyclopentadiene	10.0	U	10.0			
67-72-1	Hexachloroethane	10.0	U	10.0			
193-39-5	Indeno(1,2,3-cd)pyrene	10.0	U	10.0			
78-59-1	Isophorone	10.0	U	10.0			
91-20-3	Naphthalene	10.0	U	10.0			
100-01-6	4-Nitroaniline	25.0	U	25.0			
98-95-3	Nitrobenzene	10.0	U	10.0			
100-02-7	4-Nitrophenol	25.0	U	25.0	_}		
87-86-5	Pentachiorophenol	25.0	U	25.0	_]		
85-01-8	Phenanthrene	10.0	U	10.0	_		
108-95-2	Phenol	10.0	U	10.0			
129-00-0	Pyrene	10.0	U	10.0			
621-64-7	N-Nitroso-di-n-propylamine	10.0	C	10.0	_		
86-30-6	N-Nitrosodiphenylamine	10.0	U	10.0	_		
05.48.7	o Crosol	100	1 11	10.0	,		

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SEMINOLATILE ORGANICS ANALYSIS DATA SHEET TENTATIVELY DENTIFIED COMPOUNDS

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Lab Name: GCAL	Sample D. SKSW511008
Lab Code: LA024 2 Case No.:	Contract:
SAS No.: SDG No.: _2031114	413 Lab File D 2031126/S4188
Matrix: Water	Lab Sample D: 20311141301
Sample wt/vol: Units:	Date Collected: 11/13/03 Time: 1115
Level: (low/med)	Date Received: 11/14/03
% Moisture: not dec.	Date Extracted:
GC Column: DB-5MS-30M ID: 25	(mm) Date Analyzed: 11/26/03 Time: 2112
Concentrated Extract Volume:	(µL) Dilution Factor: 1 Analyst: RLW
Injection Volume: 1.0	(μL) Prep Method:
GPC Cleanup: (Y/N) N pH:	Analytica Method: SW-845 8270C
Number TICs Found: 2	
CONCENTRATION UNITS:	
CAS NO. COMPOUND	RT EST. CONC. Q
1. Unknown	13.473 1210
2. 301-02-0 9-Octadecenar*ide, (Z)-	14.198 38.7

1B SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

Lab Name:	GCAL	Sample ID:	SKSWFB10	08	· · · · · · · · · · · · · · · · · · ·
Lab Code:	LA024 Case No.:	Contract:	4	·	
Matrix: W	ater				203111413
Sample wt/	vol: 1000 Units: mL				File ID: 2031201/
Level: (low/	med)	Date Collecte	ed: 11/13/03	3 Time:	: 1245
	decanted: (Y/N)	Date Receive	ed: 11/14/03	3	
	: DB-5MS-30M ID: .25 (mm)	Date Analyze	d: 12/01/03	3 Time	e: 1740
	ed Sample Volume: 1000 (µL)			Anal	
		Prep Method:			\
	Volume: (µL)	•	 -		
	lume: 2 (µL)	Analytical Me	,	0 4.2	
GPC Clean	up: (Y/N) N pH:	Instrument ID	: MSSV2		
CONCENT	PATION HAUTS:				
CONCENT	RATION UNITS: ug/L				
CAS NO.	COMPOUND	RESULT	Q	RL	
95-95-4	2,4,5-Trichlorophenol	10.0	U	10.0	
88-06-2	2,4,6-Trichlorophenol	10.0	U	10.0	•
120-83-2	2,4-Dichlorophenol	10.0	U	10.0	
51-28-5	2,4-Dinitrophenol	25.0	U	25.0	🗌 นร
121-14-2	2,4-Dinitrotoluene	10.0	U	10.0	
606-20-2	2,6-Dinitrotoluene	10.0	U	10.0	
91-58-7	2-Chloronaphthalene	10.0	U	10.0	
95-57-8	2-Chlorophenol	10.0	U	10.0]
91-57-6	2-Methylnaphthalene	10.0	U	10.0	3
88-74-4	2-Nitroaniline	25.0	U	25.0	
88-75-5	2-Nitrophenol	10.0	U	10.0	
91-94-1	3,3'-Dichlorobenzidine	10.0	U	10.0	
99-09-2	3-Nitroaniline	25.0	U	25.0	
534-52-1	2-Methyl-4,6-dinitrophenol	25.0	U	25.0	
59-50-7	4-Chloro-3-methylphenol	10.0	U	10.0] _
106-47-8	4-Chloroaniline	10.0	U	10.0] R
7005-72-3	4-Chlorophenyl-phenylether	10.0	U	10.0	_
106-44-5	4-Methylphenol (p-Cresol)	10.0	U	10.0	_}
83-32-9	Acenaphthene	10.0	U	10.0	_
208-96-8	Acenaphthylene	10.0	U	10.0	⅃
120-12-7	Anthracene	10.0	U	10.0	」
56-55-3	Benzo(a)anthracene	10.0	U	10.0	-
50-32-8	Benzo(a)pyrene	10.0	U	10.0	4
205-99-2	Benzo(b)fluorant ane Benzo(g,h,i)perytine Benzo(k)fluoranthene	10.0	U	10.0	4
191-24-2	Benzo(g,h,i)perytene	100	U	10.0	4 .
207-08-9	Donze (n/neeranajone			10.0	4
111-91-1	Bis(2-Chloroethoxy)methane	10.0	U	10.0	4 :
111-44-4	Bis(2-Chloroethyt)ether	10.0	U	10.0	
108-60-1	bis(2-Chloroisopropyl)ether	10.0	U	10.0	┦ .,

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SEMINOLATILE OF SAN IN INALIS SIDETA SHEET

Lat Name:	GCAL	Samble D. St	'SWFB1008		
Lab Code:	LA024 Case No.:	Contract:			
Matrioc W		SAS No :			203111413
Sample wt/	volt 1000 Units: mL				e ID: 2031201/
Level: (low)	imed)	Date Collected:	11/13/03	Time:	1245
				_	
% MOISEUR	decanted: (YN)	Date Received:	11/14/03		
GC Column	ic D8-5MS-30M !D: .25 (mm)	Date Analyzed:	12/01/C3	Time:	1740
Concentrate	ed Sample Volume: 1300 (µL)	Dilution Factor:	1	Analy:	st: RLW
Soil Aliquot	Volume: (aL)	Prep Method:			
	illume: 2 (µL)	Analytical Metho			
GPC Clean	up: (Y/N) N pH:	instrument (D:	MSSV2		
• • • • • • • • • • • • • • • • • • • •					-,
CONCENT	RATION UNITS: UgL				
CAS NO.	COMPOUND	RESULT	Q	RL	
101-55-3	4-Bromophenyl-phenylether	10.0	u I	10.0	7
85-68-7	Butybenzylphthalate	10.0	u	10.0	}
86-74-8	Carbezole	10.0	Ü	10.0	ł
218-01-9	Chrysene	10.0	- j - {	10.0	ſ
84-74-2	Di-n-butylphthalate	C. 2 3:004	-	10.0	uī
117-84-0	D:-n-octylphtha:ale	10.0	u l	10.0	เกร
53-70-3	Dibenz(a,h)anthracene	10.0	 	10.0	1 43
132-64-9	Dibenzoluran	10.0	U I	10.0	
84-66-2	Diethylohthalate	10.0	-ŭ 	10.0	UTME
131-11-3	Dimethyl-phthalate	10.0	Ü	10.0	
105-67-9	2,4-Dimethylphenol	10.0	U	10.0	
206-44-0	Fluoranthene	10.0	Ü	10.0	
86-73-7	Fluorene	10.0	<u> </u>	10.0	
118-74-1	Herachlorobenzene	10.0		10.0	
87-68-3	Hexachlorobutadiere	10.0	Ū	10.0	
77-47-4	Hexachlorocyclopentaciene	10.0	u	10.0	นา
67-72-1	Hexachloroethane	10.0	<u> </u>	10.0	W 3
193-39-5	Indeno(1,2,3-cd)pyrene	10,0	U	10.0	
78-59-1	Isophorone	10.0	Ū	10.0	
91-20-3	Naphthalene	10.0	U	10.0	us
100-01-6	4-Nitroaniline	25.0		25.0	,
96-95-3	Nitrobenzene	10.0	U	10.0	
100-02-7	4-Nitrophenol	25.0	U	25.0	
87-86-5	Pentachlorophenoi	25.0	υ	25.0	
85-01-8	Phenanthrene	10.0	Ü	10.0	
108-95-2	Phenol	10.0	_ 	10.0	
129-00-0		10.0			
	N Norman of a programma	*0.D	U	10.0	
621-64-7	N-Nitroso-di-n-propylamine		U ·	10.0	
86-30-6	N-Nitrosodiphenylamine	10.0	U	10.0	
95-48-7	o-Cresol	.3.6	ប	10.0	

113 mg

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET TENTATIVELY IDENTIFIED COMPOUNDS

Lab Name: GCAL	Sample ID: SKSWFB1008	
Lab Code: LA024 2 Case No.:	Contract:	
SAS No.: SDG No.: 203111413	Lab File ID: 2031201/\$4200	
Matrix: Water	Lab Sample ID: 20311141305	
Sample wt/vol: Units:	Date Collected: 11/13/03 Time: 1245	
Level: (low/med)	Date Received: 11/14/03	
% Moisture: not dec.	Date Extracted:	
GC Column: DB-5MS-30M ID: .25 (mm)	Date Analyzed: 12/01/03 Time: 1740	
Concentrated Extract Volume: (µL)	Dilution Factor: 1 Analyst: RLW	
Injection Volume: 1.0 (µL)	Prep Method:	
GPC Cleanup: (Y/N) N pH:	Analytical Method: SW-846 8270C	
	Instrument iD: MSSV2	
Number TICs Found: 1		
CONCENTRATION UNITS:		
CAS NO. COMPOUND	RT EST. CONC. Q	
1 . 301-02-0 9-Octadecenamide, (Z)-	14.171 33.3	

SEMINULAT LE CRISANO DI ANALYS SICIATA SHEET.

Las Name:	GCAL		Sample ID: _S	KSW52100	8	
Lab Code:	LA024 Case No		Contract:			
Matrix: "A			SAS No.:		SDG No.:	203111413
Sample wt/	vol: 1000 Units: mL		Lat Sample ID	: 2031114	 1306 LabFi	ie ID: 2031201/S
						
Level: (IOW	fmed)		Date Collected	11/13/03	Time:	1 133
% Moisture	decanted: (Y/N)		Date Received:	11/14/03		
GC Column	n: DB-5MS-30M ID: .25	_ (mm)	Date Analyzed:	12/01/03	Time	1806
Concentrate	ed Sample Volume: 1000	(µL)	Dilution Factor:	1	Analy	st: RLW
	Volume:		Prep Method:		·	
	olume: 2		Analytical Meth	od: OLMC	14.2	
•	up: (Y/N) N pH;	_	Instrument ID:			
0.000.						
CONCENT	RATION UNITS: ug/L					
	-			_		
CAS NO.	COMPOUND		RESULT	Q	RL	_
95-95-4	2,4,5-Trichlorophenal		10.0	U	10.0]
88-06-2	2,4,6-Trichlarophena		10.0	U	10.0	_
120-83-2	2,4-Dichloropheno		10.0	U	10.0	
51-28-5	2,4-Dinitrophenol		25.C	U	25.0] us
121-14-2	2,4-Dinitrotoluene		10 .0	U	10.0	
606-20-2	2,6-Dinitrotoluene		*0.C	U	10.0	_
91-58-7	2-Chloronaphthalene		*0.C	U	10.0	}
95-57-8	2-Chlarophenoi		10.0	υ	10.0]
91-57-6	2-Methylnaphthalene		10.0	U	10.0]
88-74-4	2-Nitroaniline		25.0	U	25.0]
88-75-5	2-Nitrophenoi		10.0	U	10.0	
91- 94 -1	3,3'-Dichlorobenzidine		10.0	Ú	10.0]
99-09-2	3-Nitroaniline		25 .0	Ü	25.0]
534-52-1	2-Methyl-4,6-dinitrophenol		25.C	Ų	25.0	1
59-50-7	4-Chloro-3-methylphenol		10.0	U	10.0]
106-47-8	4-Chloroaniline		10.0	U	10.0	7 K
7005-72-3	4-Chiarophenyl-phenylether		10.0	υ	10.0	7
106-44-5	4-Methylphenol (p-Cresol)		10.0	Ü	10.0	
83-32-9	Acenaphthene		10.0	Ų	10.0	1
208-96-8	Acenaphthylene		20.0	Ü	10.0	1
120-12-7	Anthracene		10.0	U	10.0	
56-55-3	Benzo(a)anthracene	· · · · · · · · · · · · · · · · · · ·	:0:0	U	10.0	1
50-32-8	Benzo(a)pyrene		10.0	U	10.0	1
205-99-2	Benzo(b)fluoranthene		10.0	u	10.0	1
191-24-2	Benzo(g,h,i)perytene		*0.0	U	10.0	1
207-08-9	Benzo(k)fluoranthene	<u>~</u>	10.0	Ü	10.0	1
111-91-1	Bis(2-Chloroethox, methane		10.0	Ú	10.0	1
111-44-4	Bis(2-Chloroethyt)ether		10.0	U	10.0	1
108-60-1	bis(2-Chloroisoprocy: ether		10.0	Ü	10.0	1
117-81-7	bis(2-ethylhexyl)phthalate	it	J, U- 0 89 2	J	10.0	u
		• • • • • • • • • • • • • • • • • • • •	-			

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SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

				5W5	/	
Lab Name:	GCAL		Sample ID:	SKSW5210	08	
Lab Code:	LA024 Case No.:		Contract:			
Matrix: W	/ater				SDG No.:	203111413
Sample wt/	vol: 1000 Units: mL				41306 Lab F	
	(med)		Date Collecte			: 1155
						
	: decanted: (Y/N)		Date Receive			
GC Column	n: DB-5MS-30M ID: .25	_ (mm)	Date Analyze	d: 12/01/0	3 Time	e: <u>1806</u>
Concentrate	ed Sample Volume: 1000	_ (µL)	Dilution Facto	or: <u>1</u>	Anal	yst: RLW
Soil Aliquot	Volume:	(µL)	Prep Method:			
	olume: 2				10 4.2	-:
	up: (Y/N) N pH:		Instrument ID			
Or O Ologin	up. (1777) pr.:	 	modal monero			····
CONCENT	RATION UNITS: ug/L					
				_		
CAS NO.			RESULT	Q	RL RL	_
101-55-3	4-Bromophenyl-phenylether		10.0	ļ <u>U</u>	10.0	_
85-68-7	Butylbenzylphthalate		10.0	U	10.0	4
86-74-8	Carbazole	 	10.0	U	10.0	
218-01-9	Chrysene		10.0	U	10.0	٠.,٦
84-74-2	Di-n-butylphthalate	· · · · · · · · · · · · · · · · · · ·	10.0	U	10.0	านร
117-84-0	Di-n-octylphthalate		10.0	U	10.0	_ us
53-70-3	Dibenz(a,h)anthracene		10.0	U	10.0	4
132-64-9	Dibenzofuran	 	10.0	U	10.0	1,20
84-66-2	Diethylphthalate	· · · · ·	10.0	U	10.0	113 mm
131-11-3	Dimethyl-phthalate		10.0	U	10.0	4
105-67-9	2,4-Dimethylphenol		10.0	• U	10.0	
206-44-0	Fluoranthene		10.0	U	10.0	4
86-73-7	Fluorene		10.0	 	10.0	-{
118-74-1 87-68-3	Hexachlorobenzene Hexachlorobutadiene		10.0	1 0	10.0	-
77-47-4	Hexachlorocyclopentadiene		10.0	U U	10.0	us
67-72-1	Hexachloroethane		10.0	U	10.0	-1"
193-39-5	Indeno(1,2,3-cd)pyrene		10.0	u	10.0	-{
78-59-1	Isophorone		10.0	U	10.0	-
91-20-3	Naphthalene		10.0	U	10.0	u3
100-01-6	4-Nitroaniline		25.0	U	25.0	⊣" ້
98-95-3	Nitrobenzene		10.0	U	10.0	┪
100-02-7	4-Nitrophenol		25.0	U	25.0	⊣ ·
87-86-5	Pentachiorophenol		25.0	Ü	25.0	4
85-01-8	Phenanthrene		10.0	U	10.0	┥
108-95-2	Phenol		10.0	U	10.0	4
129-00-0	Pyrene		10.0	Ü	10.0	┪
621-64-7	N-Nitroso-di-n-propylamine		10.0	Ü	10.0	+
86-30-6	N-Nitrosodiphenylamine		10.0	Ü	10.0	-
05 40 7	- O		10.0	 	10.0	-1

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SEMALILATUR ORGANICS ANALYSIS DATA SHEET TENTAT ARLANDENT FIED COMPOUNDS

5~51

Lab Name: GCAL	Sample ID: SKSW521008
Lab Code: LA024 2 Case No.:	Contract
SAS No.: SDG No.: 203111413	_ab File D: 203*201/\$4201
Matrix: Water	Lab Sample 1D: 20311141306
Sample wit/vol: Units:	Date Collected: 11/13/03 Time: 1155
Level: (low/med)	Date Received: 11/14/03
% Moisture: not dec.	Date Extracted:
GC Column: DB-5MS-30M ID: 25 (mm)	Date Analyzed: 12/01/03 Time: 1806
Concentrated Extract Volume: (µL)	Dilution Factor: 1 Analyst RLW
Injection Volume: 1.0 (µL)	Prep Method:
GPC Cleanup: (Y/N) N pH:	Analytical Method: SW-846 8270C Instrument ID: MSSV2
Number TICs Found: 1	
CONCENTRATION UNITS:	
CAS NO. COMPOUND	RT EST. CONC. Q
1_301-02-0 9-Octadecenamide. (Z)-	14.174 31.5

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

			6 W 50		
Lab Name:	GCAL	Sample ID: _	SKSW53100	98	
Lab Code:	LA024 Case No.:	Contract:		· · · · · · · · · · · · · · · · · · ·	
Matrix: W	/ater	SAS No.:	·	SDG No.:	203111413
Sample wt/	vol: 1000 Units: mL	Lab Sample IE	D: <u>2031114</u>	1307 Lab F	lle ID: 2031201/
Level: (low/	(med)	Date Collected	i: <u>11/13/03</u>	Tìme:	1212
	: decanted: (Y/N)	Date Received	i: <u>11/14/03</u>		
GC Column	n: DB-5MS-30M ID: .25 (mr	n) Date Analyzed	1: 12/01/03	Time	: 1833
Concentrate	ed Sample Volume: 1000 (µL) Dilution Factor	: 1	Anal	yst: RLW
	Volume: (µL				
	olume: 2 (µL				
	up: (Y/N) N pH:				
0. 0 0					
CONCENTI	RATION UNITS: ug/L				
CAS NO.	COMPOUND	RESULT	Q	RL	•
207-08-9	Benzo(k)fluoranthene	10.0	U	10.0	7
111-91-1	Bis(2-Chloroethoxy)methane	10.0	U	10.0	7
111-44-4	Bis(2-Chloroethyl)ether	10.0	U	10.0	7
108-60-1	bis(2-Chloroisopropyl)ether	10.0	U	10.0	7
117-81-7	bis(2-ethylhexyl)phthalate	10,00.009	J	10.0	∃ u
101-55-3	4-Bromophenyl-phenylether	10.0	U	10.0	7
85-68-7	Butylbenzylphthalate	10.0	U	10.0	7
86-74-8	Carbazole	10.0	U	10.0	7
218-01-9	Chrysene	10.0	U	10.0	7
84-74-2	Di-n-butylphthalate	10.0	U	10.0	T W
117-84-0	Di-n-octylphthalate	10.0	U	10.0	us
53-70-3	Dibenz(a,h)anthracene	10.0	U	10.0	1
132-64-9	Dibenzofuran	10.0	U	10.0	1
84-66-2	Diethylphthalate	10.0	U	10.0	45
131-11-3	Dimethyl-phthalate	10.0	U	10.0	7
105-67-9	2,4-Dimethylphenol	10.0	U	10.0	
206-44-0	Fluoranthene	10.0	U	10.0	
86-73-7	Fluorene	10.0	U	10.0	
118-74-1	Hexachlorobenzene	10.0	U	10.0	1
87-68-3	Hexachlorobutadiene	10.0	U	10.0	7
77-47-4	Hexachlorocyclopentadiene	10.0	U	10.0	7 UT
67-72-1	Hexachloroethane	10.0	U	10.0	7
193-39-5	Indeno(1,2,3-cd)pyrene	10.0	U	10.0	1
78-59-1	Isophorone	10.0	U	10.0	7 ,
91-20-3	Naphthalene	10.0	U	10.0	1 u s
100-01-6	4-Nitroaniline	25.0	Ü	25.0	7
98-95-3	Nitrobenzene	10.0	U	10.0	7
100-02-7	4-Nitrophenol	25.0	U	25.0	7
87-86-5	Pentachlorophenol	25.0	Ü	25.0	7
85-01-8	Phenanthrene	10.0	U	10.0	1

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SEMNIQUAT LE CRIDANICS IN ALS SIS DATA SHEET

5452

Lab Name:	GCAL		Sample D: Se	(S.N.531908		
Lab Code:	LA024 Case No.:		Contract:			
Matrix: W			S45 No.:			203111413
	vol: 1000 Units mL					ID: 2031201/S
Level: (low)	——		Date Collected:			
-	·					12.12
% Moisture:	decarted (Y/N)		Date Received:	11/14/03		
GC Column	t: D8-5MS-30M ID: 25	(mm)	Date Analyzed:	12/01/03	Time:	1833
Concentrate	ed Sample: Volume: 1900	(uL)	Dilution Factor:	1	Analys	t RLW
Soil Aliquot	Volume:	- (µL)	Prep Method:			
	•	(µL)	Analytical Metho			
	ыр: (Y/N) N эН:	_	instrument iD:			
GFC CARRE	LED. (TIM) N		ristioner (10.	M33V2		
CONCENT	RATION UNITS: ugl					
CAS NO.	COMPOUND		RESULT	Q	RL	_
95-95-4	2,4,5-Trichlarophenol		10.0	U	10.0	
88-06-2	2.4.6-Trichlorophena		10.0	υ	10.0	
120-83-2	2,4-Dichlorophenol		10.0	U	10.0	
51-28-5	2,4-Dinitrophenol		25.0	U	25.0	ไนไ
121-14-2	2,4-Dinitratoluene	_	40.0	U	10.0	
606-20-2	2,6-Dinitrotoluene		10.0	U	10.0	
91-58-7	2-Chloronaphthalene		10.0	U	10.0	
95-57-8	2-Chlorophenol		*C.0	U	10.0	
91-57-6	2-Methylnaphthalene		10.0	υ	10.0	
88-74-4	2-Nitroaniline		25.0	U	25.0	•
88-79-5	2-Nitrophenol		10.0	U	10.0	
91-94-1	3,3'-Dichlorobenzione		10.0	Ü	10.0	
99-09-2	3-Nitroaniline		25.0	U	25.0	
534-52-1	2-Maltryl-4,6-dinitropnenoi		25.0	U	25.0	
59-50-7	4-Chioro-3-methylphen ci		10.0	U	10.0	
106-47-8	4-Chloroaniline		10.0	U	10.0	R
7005-72-3	4-Chiorophenyl-phenylether		10.0	บ	10.0	
106-44-5	4-Mathylphanoi (p-Cresci)		10.3	U	10.0	
83-32-9	Acenaphthene		.00	U	10.0	
208-96-8	Acenaphthylene		.00	U	10.0	
120-12-7	Anthracene		10.0	บ	10.0	
56-55-3	Benzo(a)anthracene		.00	Ü	10.0	
50-32-8	Benzo(a)pyrene		*C.0	U	10.0	
205-99-2	Benzo(b)fluoranthene		10.0	U	10.0	
191-24-2	Benzo(g,h.i)peryiene		10.0	U	10.0	
108-95-2	Phenol		10.0	Ü	10.0	
129-00-0	Pyrene		10.0	U	10.0	
621-64-7	N-Nitroso-di-n-propytamine		10.0	U	10.0	
86-30-6	N-Nitrosodiphenylam re		-00	-	10.0	
05-18-7	o Consol			11	10.0	

1/13/04

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET TENTATIVELY IDENTIFIED COMPOUNDS

Lab Name: G	CAL	Sample ID: SKS	5 ~ 5 } W531008	
Lab Code: LA	.024 2 Case No.:	Contract:		
SAS No.:	SDG No.: 203111413	Lab File ID: 203	1201/S4202	
Matrix: Water		Lab Sample ID:	20311141307	
Sample wt/vol:	Units:	Date Collected:	11/13/03 Tir	me: 1212
Level: (low/med		Date Received:	11/14/03	
% Moisture: no		Date Extracted:		
		Date Analyzed:	12/01/03 Tir	me: 1833
	DB-5MS-30M ID:25 (mm)	Dilution Factor:	1 An	alyst: RLW
Concentrated E	······································	Dean Mathedi		· · · · · · · · · · · · · · · · · · ·
Injection Volum	e: 1.0 (µL)	Prep Method:		· · · · · · · · · · · · · · · · · · ·
GPC Cleanup:	(Y/N) N pH:	Analytical Method	: SW-846 8270C	
·		Instrument ID: M	SSV2	
Number Ti	Cs Found: 10			
CONCENT	RATION UNITS:			
CAS NO.	COMPOUND	RT	EST. CONC.	Q
1. 0-00-0	Butyl hexadecanoate	11.734	17.5	
2. 301-02-0	9-Octadecenamide, (Z)-	14.182	39.3	
3 . 112-95-8	Eicosane	11.782	5.1	
4 . 822-23-1	Acetic acid, octadecyl ester	11.829	3.64	
5 . 638-67-5	Tricosane	12.222	4.71	
6 . 123-95-5	Octadecanoic acid, butyl ester	12.602	18.3	
7 . 112-95-8	Eicosane	12.637	9.05	
8 . 630-03-5	Nonacosane	13.029	7.95	
9 . 629-78-7	Heptadecane	13.422	10.4	
40 7009.22 8	Tetratetraccetane	13.70	7 21	

SEMICLATIE ORGAN S ANALYS S DATA SHEET

Lab Name: GCAL	ラルラッ Sample Dr. S KSW511008	
Lab Code: LAG24 Case No.:	Contract	
Matrix: Water	543 No: SDG No.: 203111413	
Sample wit/vol: 1000 Units mL	Lac Sample ID: 20311141301	
Level: (low/med)	Date Collected: 11/13/03 Time: 1115	
% Moisture: decanted: (Y/N)	Date Received: 11/14/03	
GC Column: RTX-50-30M ID: .53 (mm)	Date Analyzed: 11/30/03 Time: 0508	
Concentrated Extract Volume: (UL)	Dilution Factor: 1 Analyst: DLB	
Injection Volume: (µL)		
	Analytical Method: OLMO 4.2	
GPC Cleanup: (Y/N) N pH:		
	Sulfur Cleanup: (Y/N) N Instrument ID: GCS11A	
001000000100100000	Lab File D: 2031129/SV1104	
CONCENTRATION UNITS: ug/L		
CAS NO. COMPOUND	RESULT Q RL	
72-54-8 4.4'-DDD	0.100 U 0.100	
72-55-9 4,4'-DDE	0.100 U 0.100	
50-29-3 4,4'-DOT	0.100 U 0.100	
309-00-2 Aldrin	3.351 U 0.050	
12874-11-2 Aroclor-1016	1.00 U 1.00	
11104-28-2 Arodor-1221	2 00 U 2.00	
11141-16-5 Aroclor-1232	1 00 U 1.00	
53469-21-9 Arodor-1242	1.30 U 1.00	
12672-29-6 Arodor-1248	1.00 U 1.00	
11097-69-1 Arodor-1254	1.00 U 1.00	
11096-82-5 Aroctor-1260	1.00 U 1.00	
60-57-1 Dieldrin	0.100 U 0.100	
959-98-8 Endosulfan I	0.050 U 0.050	
33213-65-9 Endosulfan II	0.100 U 0.100	
1031-07-8 Endosulfan sulfate	0.100 U 0.100	
72-20-8 Endrin	0.100 U 0.100	
7421-93-4 Endrin aldehyde	C.100 U 0.100	
53494-70-5 Endrin ketone	0.100 U 0.100	
76-44-8 Heptachlor	0.050 U 0.050	
1024-57-3 Heptachlor epoxide	0.050 U 0.050	
72-43-5 Methoxychlor	0.500 U 0.500	
8001-35-2 Toxaphere	5.00 U 5.00	
319-84-6 alpha-BHC	0.050 U 0.050	
5103-71-9 alpha-Chlordane	0.050 U 0.050	
319-85-7 beta-BHC	0 050 U 0.050	
319-86-8 delta-BHC	0.050 U 0.050	
58-89-9 gamma-BHC (Lindare)	0.050 U 0.050	
5103-74-2 gamma-Chlordane	0.050 U 0.050	

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

Lab Name: GCAL	ame: GCAL Sample ID: SKSWFB1008				
Lab Code: LA024 Case No.:		Contract:			
Matrix: Water		SAS No.:		SDG No.: 2	203111413
Sample wt/vol: 1000 Units: mL		Lab Sample ID:	2031114	1305	
Level: (low/med)		Date Collected: 11/13/03 Time: 12			1245
% Moisture: decanted: (Y/N)		Date Received:	11/14/03		
GC Column: RTX-50-30M ID: .53	(mm)	Date Analyzed;	11/30/03	Time: ()633
Concentrated Extract Volume:			1	Analyst:	DLB
Injection Volume:					
GPC Cleanup: (Y/N) N pH:		Analytical Metho			
	··			instrument ID	: GCS11A
		Lab File ID: 20			
CONCENTRATION UNITS: ug/L		20111010. 20	01123101	1197	
CAS NO. COMPOUND		RESULT	Q	RL	
72-54-8 4,4'-DDD		0.100	U	0.100	
72-55-9 4,4'-DDE		0.100	U	0.100	
50-29-3 4,4'-DDT		0.100	U	0.100	
309-00-2 Aldrin		0.050	U	0.050	
12674-11-2 Aroclor-1016		1.00	U	1.00	
11104-28-2 Aroclor-1221		2.00	U	2.00	•
11141-16-5 Aroclor-1232 53469-21-9 Aroclor-1242		1.00	U U	1.00	
12672-29-6 Aroclor-1248		1.00		1.00	
11097-69-1 Aroclor-1254		1.00	Ü	1.00	
11096-82-5 Aroclor-1260		1.00	Ü	1.00	
60-57-1 Dieldrin		0.100	U	0.100	
959-98-8 Endosulfan I		0.050	U	0.050	
33213-65-9 Endosulfan II		0.100	U	0.100	
1031-07-8 Endosulfan sulfate		0.100	U	0.100	
72-20-8 Endrin		0.100	U	0.100	
7421-93-4 Endrin aldehyde		0.100	U	0.100	
53494-70-5 Endrin ketone 76-44-8 Heptachlor		0.100 0.050	U	0.100 0.050	
1024-57-3 Heptachlor epoxide		0.050	- 0	0.050	
72-43-5 Methoxychlor		0.500	U	0.500	
8001-35-2 Toxaphene		5.00	Ü	5.00	
319-84-6 alpha-BHC		0.050	บ	0.050	
5103-71-9 alpha-Chlordane		0.050	Ū	0.050	
319-85-7 beta-BHC		0.050	U	0.050	
319-86-8 delta-BHC		0.050	υ	0.050	
58-89-9 gamma-BHC (Lindane)		0.050	U	0.050	
5102.74.2 Jaamma Chlordana		יח חבח	11	0.050	

SEMPLOLATILE ORGANICE ANALYSIS DATA SHEET

Lab Name: GCAL_____ Sample D. SKSW521**00**8 Lab Code: LAC24 Case No.: Contract: SAS No: SDG No.: 203111413 Matrix: Water Sample wt/vol: 1000 Units mL Lab Sample ID: 20311141306 Level: (fow/med) Date Collected: 11/13/03 Time: 1155 % Moisture: decanted: (Y/N) Date Received: 11/14/03 GC Column: RTX-50-30M ID: .53 (mm) Date Analyzed: 11/30/03 Time: 0701 Concentrated Extract Volume: [µL) Dilution Factor: 1 Analyst: DLB Prep Method: Injection Volume: _____ (μL) GPC Cleanup: (Y/N) N pH: Analytical Method: OLMO 4.2 Sulfur Cleanup: (Y/N) N Instrument ID: GCS11A

Lab File iD: 2031129/SV1104

CONCENTRATION UNITS: Ug/L

CAS NO.	COMPOUND	RESULT	Q	RL
72-54-8	4.4'-DOD	0.100	บ	0.100
72-55-9	4,4'-DDE	0.100	U	0.100
50-29-3	4,4'-00T	9.10€	U	0.100
309-00-2	Aldrin	0 05€	U	0.050
12674-11-2	Arocior-1016	: oc	J	1.00
11104-28-2	Aroclor-1221	2.00	U	2.00
11141-16-5	Aroclor-1232	1.00	U	1.00
53469-21-9	Aroclor-1242	1.00	U	1.00
12672-29-6	Aroclor-1248	1.00	υ	1.00
11097-69-1	Aroctor-1254	1.00	U	1.00
11096-82-5	Aroclor-1260	1.00	U	1.00
60-57-1	Dieldrin	0.100	U	0.100
959-98-8	Endosulfan i	0.050	U	0.050
33213-65-9	Endosulfan II	0.100	U	0.100
1031-07-8	Endosulfan sulfate	0.100	U	0.100
72-20-8	Endrin	0.100	U	0.100
7421-93-4	Endrin aldehyde	0.100	U	0.100
53494-70-5	Endrin ketone	0.100	U	0.100
76-44-8	Heptachior	0.050	U	0.050
1024-57-3	Heptachior epoxide	0.050	U	0.050
72-43-5	Methoxychior	9.500	U	0.500
0001-35-2	Toxaphene	5.00	U	5.00
319-84-6	alpha-BHC	0.050	U	0.050
5103-71-9	alpha-Chiordane	0.050	Ū	0.050
319-85-7	beta-8HC	ე.05ე	Ü	0.050
319-86-8	delta-BHC	0.050	U	0.050
58-89-9	gamma-8HC (Lincare.	2 050	IJ	0.050
5103-74-2	gamma-Chlordane	3 050	Ū	0.050

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

Lab Name: GCAL	らいちん Sample ID: SKSW531008
Lab Code: LA024 Case No.:	Contract:
Matrix: Water	SAS No.: SDG No.: 203111413
Sample wt/vol: 1000 Units: mL	Lab Sample ID: 20311141307
Level: (low/med)	Date Collected: 11/13/03 Time: 1212
% Moisture: decanted: (Y/N)	Date Received: 11/14/03
GC Column: RTX-50-30M ID: .53 (mm)	Date Analyzed: 11/30/03 Time: 0729
Concentrated Extract Volume: (µL)	Dilution Factor: 1 Analyst: DLB
Injection Volume: (µL)	Prep Method:
GPC Cleanup: (Y/N) N pH:	Analytical Method: OLMO 4.2
	Sulfur Cleanup: (Y/N) N Instrument ID: GCS11A
CONCENTRATION UNITS: ug/L	Lab File ID: 2031129/SV1104
CAS NO. COMPOUND	RESULT Q RL
72-54-8 [4,4'-DDD	0.100 U 0.100
72-55-9 4,4'-DDE	0.100 U 0.100
50-29-3 4,4'-DDT	0.100 U 0.100
309-00-2 Aldrin	0.050 U 0.050
12674-11-2 Aroclor-1016	1.00 U 1.00
11104-28-2 Arodor-1221	2.00 U 2.00
11141-16-5 Arodor-1232	1.00 U 1.00
53469-21-9 Aroclor-1242	1.00 U 1.00
12672-29-6 Aroclor-1248	1.00 U 1.00
11097-69-1 Aroclor-1254	1.00 U 1.00
11096-82-5 Aroclor-1260	1.00 U 1.00
60-57-1 Dieldrin	0.100 U 0.100
959-98-8 Endosulfan I	0.050 U 0.050
33213-65-9 Endosulfan II	0.100 U 0.100
1031-07-8 Endosulfan sulfate	0.100 U 0.100
72-20-8 Endrin	0.100 U 0.100
7421-93-4 Endrin aldehyde	0.100 U 0.100
53494-70-5 Endrin ketone	0.100 U 0,100
76-44-8 Heptachlor	0.050 U 0.050
1024-57-3 Heptachlor epoxide	0.050 U 0.050
72-43-5 Methoxychlor	0.500 U 0.500
8001-35-2 Toxaphene	5.00 U 5.00
319-84-6 alpha-BHC	0.050 U 0.050
5103-71-9 alpha-Chlordane	0.050 U 0.050
319-85-7 beta-BHC	0.050 U 0.050
319-86-8 delta-BHC	0.050 U 0.050
58-89-9 gamma-BHC (Lindane)	0.050 U 0.050
5103-74-2 gamma-Chlordane	0.050 U 0.050

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Lab Name:	GCAL		Contract:	
Lab Code:	LA024	Case No.:	SAS No.:	SDG No.: 203111413
SOW No.:				
		EPA Sample No.	Lab Sample ID.	
		SKSW511008	20311141301	
		SKSW511008 MS	20311141302	
		SKSW511008 DUP	20311141304	
		SKSWFB1008	20311141305	
		SKSW521008	20311141306	
		SKSW531008	20311141307	
		SKSW511008 (DISS)	20311141308	
		SKSW511008 MS (DISS)	20311141309	~
		SKSW511008 DUP (DISS)	20311141310	
		SKSWFB1008 (DISS)	20311141311	
		SKSW521008 (DISS)	20311141312	
		SKSW531008 (DISS)	20311141313	
		Were ICP interelement corrections appl	ed? Yes/No YES	
		Were ICP background corrections appli		
		If yes-were raw data generated be application of background corrector		
			100.100	-
Comment	<u>* </u>			
				
				~ ~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~
other than	n the conditions milled on the dis	rage is in compliance with the terms and detailed above. Release of this data contr cette has been authorized by the Laborat	ained in this hardcopy data packag	e and in the computer readable
Signature	: Shelle	Bouregow	Name: Shelley Tile: Inorgan	Bourgeois
Date:	12/12	703	Title: Inorgan	ic Manager

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U.S. EPA - CLP

EPA SAMPLE NO.

Ì	INORGANIC	AMAI VSIS	DATA	SHEET
į	DIVINDRUMIC	ANALISIS	DAIA	SMEEL

SKSW511008	
SW 50	

	5W 50
Contract:	
SAS No.:	SDG No.: 203111413
Lab Sample ID: 20311141301	
Date Received: 11/14/03	
•	
	SAS No.: Lab Sample ID: 20311141301

Concentration Units (ug/L or mg/kg dry weight): ug/L

CAS No.	Analyte	Concentration	С	Q	M
7440-36-0	Antimony	3.7	Ū		P
7440-38-2	Arsenic	3.4	В		P
7440-39-3	Barium	41.3	В		P
7440-41-7	Beryllium	0.1	U		Р
7440-43-9	Cadmium	0.2	U		Р
7440-47-3	Chromium	0.8	Ü		P
7440-50-8	Copper	4.4	В		Р
7439-89-6	iron	69.2	- B		Р
7439-92-1	Lead	1.5	U		Р
7439-97-6	Mercury	0.1	Ú		AV
7440-02-0	Nickel	0.7	U		P
7782-49-2	Selenium	4.4	U	N	Р
7440-22-4	Silver	0.4	U		P
7440-28-0	Thallium	2.6	υ		P
7440-66-6	Zinc	1.3	В		P
57-12-5	Cyanide	3.0	Ū		AS

Color Before:	COLORLESS	Clarity Before:	CLEAR	Texture:	
Color After:	COLORLESS	Clarity After:	CLEAR	Artifacts:	
Comments:					

INORGANIC ANAL 8 8 DATA SHEET

SKSW5: 1008 DUP	
64.50	

					SW	50	
Lab Name:	GCAL	······	Contract:		·		
Lab Code:	LA024	Case No.:	SAS No.:		SDG No.:	203111413	
Matricc (soil	/ water)	Water	Lab Sample ID:	20311141304			
Level: (low/	med)		Date Received	11/14/03			
% Solids:		-			-		

Concentration Units (ug/t, or mg/kg dry weight): ug/L

CAS No.	Analyte	Concentration	С	Q	M
7440-36-0	Antimony	3.7	U		P
7440-38-2	Arsenic	29	Û		P
7440-39-3	Barium	40.8	9		Р
7440-41-7	Beryffum	0.1	Ü		P
7440-43-9	Cadmium	0.2	Ĺ .		Р
7440-47-3	Chromium	0.8	Ų		Р
7440-50-8	Copper	3.7	8		Р
7439-89-6	Iron	64.1	8		P
7439-92-1	Lead	1.5	_		P
7439-97-6	Mercury	0.1	-		AV
7440-02-0	Nickel	0.7	J		Р
7782-49-2	Selenium	4.4	U	N	P
7440-22-4	Silver	3.4	j		Р
7440-28-0	Theffum	2.6	J		P
7440-66-6	Zinc	0.6	Ú		P
57-12-5	Cyanide	3.0	IJ		AS

Color Before:	COLORLESS	Clarity Before	CLEAR	Texture:	
Color After:	COLORLESS	Clarity After	CLEAR	Artifacts:	

Comments:

U.S. EPA - CLP

INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO.

					SKSWF	31008	ľ
Lab Name:	GCAL		Contract:			· · · · · · · · · · · · · · · · · · ·	J
Lab Code:	LA024	Case No.:	SAS No.:		SDG No.:	203111413	
Matrix: (soil	/ water)	Water	Lab Sample ID:	20311141305			
Level: (low /	/ med)		Date Received:	11/14/03			
% Solids:		red-ablants					

Concentration Units (ug/L or mg/kg dry weight):

ug/L

CAS No.	Analyte	Concentration	С	Q	М
7440-36-0	Antimony	3.7	υ		Р
7440-38-2	Arsenic	2.9	U		P
7440-39-3	Barium	0.3	U	····	Р
7440-41-7	Beryllium	0.1	U		Р
7440-43-9	Cadmium	0.2	U		Р
7440-47-3	Chromium	0.8	U		Р
7440-50-8	Copper	1.2	U		Р
7439-89-6	Iron	14.1	U		P
7439-92-1	Lead	1.5	U		P
7439-97-6	Mercury	0.1	U		AV
7440-02-0	Nickel	0.7	U		Р
7782-49-2	Selenium	4.4	U	N	Р
7440-22-4	Silver	0.4	U		Р
7440-28-0	Thallium	2.6	Ū		Р
7440-66-6	Zinc	0.6	U		Р
57-12-5	Cyanide	3.0	Ü		AS

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Color Before:	COLORLESS	Clarity Before:	CLEAR	Texture:	
Color After:	COLORLESS	Clarity After:	CLEAR	Artifacts:	
Comments:					

EPA SAMPLE NO.

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		SHS W52	i
Lab Name: GCAL	Contract:		
Lab Code: LA024 Case No.:	SAS No.:	SDG No.:	203111413
Matrix (soil / water) Water	Lab Sample ID. 2031	1141306	
Level: (low / med)	Date Received: 11/1	4/03	
% Solida:		<u> </u>	

Concentration Units (ug/L or mg/kg dry weight):

CAS No.	Analyte	Concentration	Ç	Q	M
7440-36-0	Antimony	3 -			P
7440-38-2	Arsenic	2.9	-		P
7440-39-3	Barium	42.5	£		P
7440-41-7	Berytium	0.1			P
7440-43-0	Cadmium	0.2	Ų		P
7440-47-3	Chromium	0.8	į.		P
7440-50-8	Copper	3.2	E		P
7439-89-8	iron	83 8	₿		P
7439-92-1	Lead	1.5			Р
7439-97-6	Mercury	0.1	l		AV
7440-02-0	Nickel	ე.7	L .		: P
7782 -49- 2	Seienium	4.4	U U	N	Р
7440-22-4	Silver	0.4			Р
7440-28-0	Thellium	2.6	Ĺ		P
7440-66-6	Zinc	0.6	-		Р
57-12-5	Cyanide	3.0	-		AS

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Calor Before:	COLORLESS	Clarity Before:	CLEAR	Texture:	
Color After:	COLORLESS	Clarity After:	CLEAR	Artifacts:	

Comments:

U.S. EPA - CLP

INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO.

SKSW531008	
500 E 2	

Lab Name: GCAL	Contract:	3,43%
Lab Code: LA024 Case No.:	SAS No.:	SDG No.: 203111413
Matrix: (soil / water) Water	Lab Sample ID: 20311141307	
Level: (low / med)	Date Received: 11/14/03	
% Solids:		

Concentration Units (ug/L or mg/kg dry weight):

ug/L

CAS No.	Analyte	Concentration	С	Q	M	٦
7440-36-0	Antimony	3.7	U		P	٦
7440-38-2	Arsenic	2.9	U	·	Р	٦
7440-39-3	Barium	41.2	В		Р	٦
7440-41-7	Beryllium	0.1	U		Р	٦
7440-43-9	Cadmium	0.2	U		Р	٦
7440-47-3	Chromium	0.8	U		Р	٦
7440-50-8	Copper	3.3	В		Р	٦
7439-89-6	Iron	79.6	В		Р	٦
7439-92-1	Lead	1.5	U		Р	٦
7439-97-6	Mercury	0.1	U		AV	٦
7440-02-0	Nickel	0.7	U		Р	٦
7782-49-2	Selenium	4.4	U	N	P	٦
7440-22-4	Silver	0.4	U		Р	٦
7440-28-0	Thallium	2.6	U		Р	٦
7440-66-6	Zinc	0.6	V		Р	٦
57-12-5	Cyanide	3.0	U		AS	٦

Color Before:	COLORLESS	Clarity Before:	CLEAR	Texture:	
Color After:	COLORLESS	Clarity After:	CLEAR	Artifacts:	
Comments:			·		

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EPA SAMPLE NO.

MORGANIO PNALYSIS LATA SHEE

SK SW51	1008	(DISS)	
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				1	5~	50	ì
Lab Name:	GCAL		Contract				
Lab Code:	LA024	Case No.:	SAS No		SDG No.:	203111413	
Matric (soil	/ water)	Water	Lab Sample (D)	20311141308	· · · · · · · · · · · · · · · · · · ·		
Level: (10w/	med)		Date Received	11/14/03			
% Solids:							

ug/L Concentration Units (ug/L or mg/kg dry weight):

CAS No.	Anaryte	Concentration	2	q	M
7440-36-0	Antimony	3.7	J		P
7440-38-2	Arsenic	2.9	÷		P
7440-39-3	Barium	40 0	3		P
7440-41-7	Beryffum	9.1	Ĵ		P
7440-43-8	Cadmium	€ 2	J		P
7440-47-3	Chromium	: 8	-		P
7440-50-8	Copper	4 4	В	· 	P
7439-89-6	tron	14.1	J		Ρ
7430-92-1	Leed	1.5	J		P
7439-97-6	Mercury	0.1	ر ر		AV
7440-02-0	Nickel	0.7	IJ	,	P
7782-49-2	Selenium	4.4	J	N	P
7440-22-4	Silver	0.4	Ľ		P
7440-28-0	Thallium	26	,		P
7440-66-6	Zinc	06	u	•	P

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Color Before:	COLORLESS	Clarity Before:	CLEAR	Tedure:	•
Color After:	COLORLESS	Clarky After:	CLEAR	Artifacts:	

Comments:

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INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO.

	SKSW51	1008	DUP	(DISS)
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Lab Name: GCAL	Contract:		5W	50
Lab Code: LA024 Case No.:	SAS No.:		SDG No.:	203111413
Matrix: (soil / water) Water	Lab Sample ID:	20311141310		
Level: (low / med)	Date Received:	11/14/03		
% Solids:				

Concentration Units (ug/L or mg/kg dry weight):

CAS No.	Analyte	Concentration	С	Q	М
7440-36-0	Antimony	3.7	U		
7440-38-2	Arsenic	2.9	U		Р
7440-39-3	Barium	42.1	В		Р
7440-41-7	Beryllium	0.1	U		P
7440-43-9	Cadmium	0.2	U		Р
7440-47-3	Chromium	0.8	U		Р
7440-50-8	Copper	4.2	В		Р
7439-89-6	Iron	14.1	U		Р
7439-92-1	Lead	1.5	U		Ρ
7439-97-6	Mercury	0.1	U		AV
7440-02-0	Nickel	0.9	В		Р
7782-49-2	Selenium	4.4	U	N	Р
7440-22-4	Silver	0.4	U		Р
7440-28-0	Thallium	2.6	U		Р
7440-66-6	Zinc	46.1		•	Р

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Color Before:	COLORLESS	Clarity Before:	CLEAR	Texture:	
Color After:	COLORLESS	Clarity After:	CLEAR	Artifacts:	~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~
Comments:					

L S EF 4 - CLP

EPA SAMPLE NO.

MORGANIO ANALIES DATA SHEET

CVC*ACD1000	mees
SKS:VF31008	(DI22)

Lab Name: GCAL	Contract:		
Lab Code: LA024 Case No.:	S45 No.:	SDG No.:	203111413
Matrbc (soil / water) Water	Lab Sample (D: 20311141311		
Level: (low/med)	Date Received: 11/14/03		
% Solids:			

Concentration Units (ug/L or mg/kg dry weight) . ug/L

CAS No.	Analyte	Concentration	С	Q	М
7440-36-0	Antimony	3.7	ڶ		P
7440-38-2	Arsenic	29	J		Р
7440-39-3	Barium	03	В		Ρ
7440-41-7	Beryllium	9.1	IJ		P
7440-43-9	Cadmium	0.2	บ		Ρ
7440-47-3	Chromium	0.9	Ü		P
7440-50-8	Copper	1.6	Э		P
7439-89-6	Iron	14.1	U		ρ
7439-92-1	Leed	1.5	U		Р
7439-97-6	Mercury	01	J		AV
7440-02-0	Nickel	0.7	U		P
7782-49-2	Selenium	4.4	Ü	N	Р
7440-22-4	Silver	0.4	J		P
7440-26-0	Thelium	26			P
7440-66-6	Zinc	0.6	Ų	•	Р

11510%

Color Before:	COLORLESS	Clarity Before	CLEAR	Texture:	
Color After:	COLORLESS	Clarity After	CLEAR	Artifacts:	

Comments:

U.S. EPA - CLP-

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EPA SAMPLE NO.

INORGANIC ANALYSIS DATA SHEET

SKS	W52	210	80	(DISS)	
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Lab Name: GCAL	Contract:		500) ′
Lab Code: LA024 Case No.:	SAS No.:		SDG No.:	203111413
Matrix: (soil / water) Water	Lab Sample ID:	20311141312		
Level: (low / med)	Date Received:	11/14/03		
% Solids:				

Concentration Units (ug/L or mg/kg dry weight):

ug/L

CAS No.	Analyte	Concentration	С	Q	M
7440-36-0	Antimony	3.7	U	······································	P
7440-38-2	Arsenic	3.2	В		Р
7440-39-3	Barium	42.2	В		P
7440-41-7	Beryllium	0.1	U		Р
7440-43-9	Cadmium	0.2	U		Р
7440-47-3	Chromium	0.8	U		P
7440-50-8	Copper	5,1	В		Р
7439-89-6	Iron	14.1	U		Р
7439-92-1	Lead	1.5	U		Р
7439-97-6	Mercury	0.1	U		ÄV
7440-02-0	Nickel	0.7	U		Р
7782-49-2	Selenium	4.4	U	N	P
7440-22-4	Silver	0.4	U		
7440-28-0	Thallium	2.6	U		P
7440-66-6	Zinc	0.6	U	•	P

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Color Before:	COLORLESS	Clarity Before:	CLEAR	Texture:	
Color After:	COLORLESS	Clarity After:	CLEAR	Artifacts:	

Comments:

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EPA SAMPLE NO.

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SKSW 531008	(DISS)
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Lab Name:	GCAL		Otheract:			
Lab Code:	LA024	Case No.:	94 S Nc.	SDG No.:	203111413	
Matric (soi	l/water)	Water	Lab Sample (D: 2031114131	3		
Level: (low	/med)		Date Received: 11/14/03			
% Solids:				-		

Concentration Units (ug/L or mg/kg dry weight) :

ug/L

CAS No.	Anayt e	Concentration	С	Q	M
7440-36-0	Antimony	3.7	U		P
7440-38-2	Arsenic	2.9	υ		P
7440-39-3	Barium	40.7	E		P
7440-41-7	Berytium .	3.1	Ú		P
7440-43-9	Cadmium	0.2	Ų.		P
7440-47-3	Chromium	2.8	<u>U</u>		Р
7440-50-8	Copper	3.7	8		P
7439-89-6	Iran	14,1	Ú		P
7439-92-1	Leed	15	ل		P
7439-97-6	Mercury	0.1	•		AV
7440-02-0	Nickel	0.7	Ų		Р
7782-49-2	Selenium	4.4	Ų	N	Р
7440-22-4	Silver	C.4	Ĺ		P
7440-28-0	Thallium	2.5			P
7440-66-6	Zinc	1.5	E	•	P

Color Before:	COLORLESS	Clarity Before:	CLEAR	Texture:	
Color After:	COLORLESS	Clarity After	CLEAR	Artifacts:	

Comments:

FORM -IN

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000422

GULF COAST ANALYTICE LAWORATORIES. INC
7979 GSRI Avenue, Baton Rouge, Louisiana 70820-7402
Phone 225.769.4900 • Fax 225.767.5717

CHAIN OF CUST BY RECORD

263/1/4

Cutto 160

Cutto 160

Client Name

Client # Workorder #

263/11/12	<u> </u>
203111311	11-28-03
Workorder #	Due Date

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Fax: \$39 442 2311	_ Fax:			1			V			·
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QULF	COAST	AMALYTIC	AL L-	WORKTO	MES, INC	

CHAIN OF CUSTODY RECORD

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HULF COAL	T AMALYTICAL LA	MONATORIES, INC	
7979 G	SRI Avenue, B	aton Rouge, Lou	isiana 70820-7402
1	Phone 225.761	9 4900 • Fax 221	5 787 5717

Lab use only Earth Tien

4342

203111413 11-2863

Workorder # Bill to: Lab use only: Analytical Requests & Method **Custody Seal** Client: used yes [] no Address: in fact Dyes Contact: Temperature *C Contact: Phone: Fax: Teret Copis + for Hissing Sample Description Preservatives Con-5K5W51195D1008 of analytes

Turn Around Time:

☐ 24-48 hrs.

3 days

Standard 1 week Date:

☐ Other

Received by: (Signature)

eceived by: (Signature

Received by: (Signature)

Note:

Feel Ex 8425 9530 8310

By submitting these samples, you agree to the terms and conditions contained in our most recent schedule of services.

7979 GSRI Avenue, Baton Rouge, Louisiana 70820-7402 Phone 225.769.4900 • Fax 225.767.5717

CHAIN OF CUSPOY RECORD

Lab use only

4342

203111413

Workorder #

Phone 225.769.4900 • Fax 225.767.5717	Client Name		1 0	Client #	Workorder #	Due Date
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CHAIN OF CUSTORY RECORD Lab use only Earth Tech 203111413 7979 GSRI Avenue, Baton Rouge, Louisiana 70820-7402 Phone 225.769 4900 • Fax 225.767.5717 Client Name Lab use only: Bill to: Report to: Analytical Requests & Method **Custody Seal** Client: [] **ÿes** [] no used Address: in tact ☑ yes []no Temperature °C Contact: 247 1412 2800 Phone: Project Name/Number Land Fill 4th Or 2003 P.O. Number Jus & fall they was Lab III Matrix¹ ()ate Sample Description Preservatives tainers 1. 1.1. KIT B 1.275 589111 1918 13508/115/198 15K51/52 1167 カイ・スクシスペンギ 5564158 1008 -3 5/6018FD 1008 5KCUTIS 188 705 Turn Around Time: 24-48 hrs. □ Standard ☐ Other ☐ 3 days 1 week Note: * Samples are in separate work order. Received by: (Signature) Date: Time: Received by: (Signature) Date: Time: Relinquished by: (Signature) 11-11/203 Relinquished by: 'Signature) Received by: (Signature) By submitting these samples, you agree to the terms and

conditions contained in our most recent schedule of services.

SWD-3 (not SWD-52)

DATA VALIDATION REPORT

FOR

SKINNER LANDFILL SITE

EARTH TECH: PROJECT NUMBER 38335

LABORATORY REPORT NUMBER 20312150701

PROJECT MANAGER: Ron Rolker

Date: February 2, 2004

Data Validator: Mark Kromis

APPENDIX C LIST OF ACRONYMS

BFB Bromofluorobenzene
CC Continuing Calibration

CCV Continuing Calibration Verification
CCB Continuing Calibration Blanks
CLP Contract Laboratory Program
CRDL Contract Required Detection Limit
DFTPP Decafluorotriphenylphosphine

GC/MS Gas Chromatograph/Mass Spectrometer

IC Initial Calibration
ICB Initial Calibration Blank
IDL Instrument Detection Limit
ICP Inductively Coupled Plasma
ICS Interference Check Sample
ICV Initial Calibration Verification

ILM Inorganic Analysis Multi-Media Multi-Concentration

INDAM Individual A Mixture INDBM Individual B Mixture mg/L milligrams per liter

MS/MSD Matrix Spike/Matrix Spike Duplicate
OLC Organic Analysis Low Concentration

OLM Organic Analysis Multi-Media Multi-Concentration

%D Percent Difference

% RSD Percent Relative Standard Deviation

PB Preparation Blanks
QC Quality Control
RF Response Factor

RPD Relative Percent Difference
RRF Relative Response Factor
SDG Sample Delivery Group
SOW Statement of Work

µg/L micrograms per liter

US EPA United States Environmental Protection Agency

VOC Volatile Organic Compounds
VTSR Validated Time of Sample Receipt

DATA VALIDATION SUMMARY – SAMPLE DELIVERY GROUP 20312150701 INORGANICS

Validation of the inorganics data, as prepared by Gulf Coast Analytical Laboratories (GCAL) for the samples collected from the Skinner Landfill site in November 2003, was conducted by Earth Tech using the National Functional Guidelines for Inorganic Data Review, (US EPA, February, 1994), as appropriate. These data were reported by GCAL under Sample Delivery Group (SDG) 20312150701.

GCAL#	Sample Description
20312150701-01	SKSWD521008
20312150701-02	SKSWD52DUP1008
20312150701-05	SKSWD521008 DISS
20312150701-06	SKSWD52DUP1008 DISS

INTRODUCTION

Analyses of metals were performed according to Contract Laboratory Program (CLP)-Inorganic Analysis Multi-media Multi-concentration ILM04.1 Statement of Work (SOW). Results of the sample analyses are reported by the laboratory as either qualified or unqualified. Unqualified results mean that the reported values maybe used without reservation. Various qualifier codes are used by the laboratory to denote specific information regarding the analytical results.

The data validation process is intended to evaluate the data on a technical basis. The data package also was subjected to an internal laboratory quality review prior to submission to Earth Tech for data validation.

During the validation process, laboratory-qualified and unqualified data are verified against all available supporting documentation. Based on this evaluation, qualifier codes may be added, deleted or modified by the data user. Final results are therefore, either qualified or unqualified. Validator-qualified results are annotated with the following codes in accordance with the Functional Guidelines:

- U The constituent was analyzed for, but was not detected above the level of the associated analytical reporting limit. The associated value is either the sample quantitation limit or the sample detection limit.
- The analyte was positively identified; the associated numerical value is the approximate concentration of the analyte in the sample.
- UJ The analyte was not detected above the reported sample quantitation limit. However, the reported quantitation limit is approximate and may or may not represent the actual limit of quantitation necessary to accurately and precisely measure the analyte in the sample.

R The sample results are rejected due to serve a deficiencies in the ability to analyze the sample and meet quality control criteria. The presence or absence of the analyte cannot be verified.

Details of the inorganics data validation findings and conclusions are provided in the following sections of this report:

- 1. Holding Times
- 2. Calibration
 - A. Initial Calibration (IC)
 - B. Continuing Calibration (CC)
- 3. Blanks
- 4. Inductively Coupled Plasma (ICP) Interference Check Sample
- 5. Laboratory Control Sample (LCS)
- 6. **Duplicate Analysis**
- 7. Spike Sample Analysis
- 8. ICP Serial Dilution
- 9. System Performance
- 10. Documentation
- 11. Overall Assessment

1. HOLDING TIMES

All samples for inorganics analyses were analyzed within the 180-day holding time for preserved aqueous samples. Mercury analyses were conducted within the 28-day holding time for aqueous samples undergoing CLP protocol. Cyanide analyses were conducted within the 14-day holding time. The cooler temperature upon receipt at the laboratory was within the recommended temperature of 4°C +/- 2°C.

2. CALIBRATION

A. Initial Calibration

The percent recoveries for the Initial Calibration Verification (ICV) standard were within Quality Control (QC) limits for all constituents.

B. Continuing Calibration

The percent recoveries for the Continuing Calibration Verification (CCV) standard were within QC limits for all constituents.

3. BLANKS

The Initial Calibration Blank (ICB), Continuing Calibration Blanks (CCB) and Preparation Blanks (PB) were analyzed at the appropriate frequencies. No constituents were detected in the ICB, CCB, and PB blanks above the corresponding Contract Required Detection Limit (CRDL).

4. ICP INTERFERENCE CHECK SAMPLE

Results for the ICP analysis of the Interference Check Sample (ICS) solution AB were within 20% of the true value.

5. LABORATORY CONTROL SAMPLES

Recoveries were within the control limit (80-120%) for all constituents.

6. DUPLICATE ANALYSIS

The Relative Percent Difference (RPD) between the sample and duplicate results were within the acceptance criteria for all target compounds.

7. SPIKE SAMPLE ANALYSIS

The laboratory used sample SKSWD521008 for the matrix spike sample. The MS percent recoveries were within the acceptance criteria (75%-125%) in the total and dissolved fractions with the exception of Mercury (47%). As per the National Functional Guidelines: if the percent recovery is greater than 30% and less than 74% qualify detected results for that analyte with "J" and non-detected results with "UJ".

8. ICP SERIAL DILUTION

As noted in the National Functional Guidelines: If the analyte concentration is at least 50 times above the IDL, its serial dilution analysis must then agree within 10% of the original determination after corrected for dilution. The serial dilution is performed to determine whether any significant chemical or physical interference's exist due to matrix effects.

The percent differences while within the acceptance criteria for all target analytes with the exception of Zinc. As per the National Functional Guidelines if the percent difference criteria is not met qualify the associated results with "I".

9. SYSTEM PERFORMANCE

The analytical system appears to have been working well at the time of these analyses, based on the evaluation of the raw data.

10. DOCUMENTATION

The documentation appeared accurate and in order.

11. OVERALL ASSESSMENT

The results are acceptable with the validator-added qualifiers.

DATA VALIDATION SUMMARY – SAMPLE DELIVERY GROUP 20312150701 SEMIVOLATILE ORGANICS

Validation of the Gas Chromatograph/Mass Spectrometer (GC/MS) semi-volatile organics data, as prepared by Gulf Coast Analytical Laboratories (GCAL) for the samples collected from the Skinner Landfill site in November 2003, was conducted by Earth Tech using the National Functional Guidelines for Organic Data Review, (US EPA, October, 1999) as appropriate. These data were reported by GCAL under SDG 20312150701.

GCAL#	Sample Description
20312150701-01	SKSWD521008
20312150701-02	SKSWD52DUP1008

INTRODUCTION

Analyses were performed according to CLP-Organic Analysis Multi-Media, Multi-Concentration OLM04.2 SOW. Results of the sample analyses are reported by the laboratory as either qualified or unqualified. Unqualified results mean that the reported values may be used without reservation. Various data qualifier codes are used by the laboratory to denote specific information regarding the analytical results. The data validation process is intended to evaluate the data on a technical basis. The data package also was subjected to an internal laboratory quality review prior to submission to Earth Tech for data validation.

During the validation process, laboratory-qualified and unqualified data are verified against all available supporting documentation. Based on this evaluation, qualifier codes may be added, deleted or modified by the data user. Final results are therefore, either qualified or unqualified. Validator-qualified results are annotated with the following codes in accordance with the Functional Guidelines:

- U The constituent was analyzed for, but was not detected above the level of the associated analytical reporting limit. The associated value is either the sample quantitation limit or the sample detection limit.
- J The analyte was positively identified; the associated numerical value is the approximate concentration of the analyte in the sample.
- UJ The analyte was not detected above the reported sample quantitation limit. However, the reported quantitation limit is approximate and may or may not represent the actual limit of constitution necessary to accurately and precisely measure the analytic in the staple.
- R The sample results are rejected due to serious deficiencies in the ability to analyze the sample and meet quality control criteria. The presence or absence of the analyte cannot be verified.

Details of the semivolatile data validation findings and conclusions are provided in the following sections of this report:

- 1. Holding Times
- 2. GC/MS Tuning
- 3. Calibration
 - A. IC
 - B. CC
- 4. Blanks
- 5. System Monitoring Compound Recovery
- 6. MS/MSD
- 7. Internal Standards Performance
- 8. Compound Identification
- 9. Constituent Quantitation and Reported Detection Limits
- 10. System Performance
- 11. Documentation
- 12. Overall Assessment

1. HOLDING TIMES

All samples were initially extracted within the seven-day technical holding time and the five-day VTSR method holding time. The cooler temperature upon receipt at the laboratory was within the recommended temperature of $4^{\circ}C \div /- 2^{\circ}C$.

2. GC/MS TUNING

The samples were analyzed on a single GCMS system, identified as MSSV2. One decafluorotriphenylphosphine (DFTPP) tune was run representing the shift in which the standards and samples were analyzed. The DFTPP tune is acceptable.

3. CALIBRATION

A. Initial Calibration

One IC dated 12/24/03 was analyzed in support of the semivolatile sample analyses. Documentation of the IC was present in the data package, and the Relative Response Factor (RRF), as well as percent % RSD values were accurately reported for all target compounds. The criteria employed for technical data review purposes are different than those used in the method. The laboratory must meet a minimum RRF of 0.01; however, for data review purposes, a RRF criterion of "greater than or equal to 0.05" is applied to all semi-volatile compounds. The RRF's and the average RRF were within the acceptance criteria specified in the method for all reported analytes. The %RSD's were within the acceptance criteria specified in the method for all target analytes with the exception of 2,4,6-Trichlorophenol (31.0%), 2,4-Dinitrophenol (32.2%), and Diethylphthalate (41.0%). The lowest point of the calibration curve was dropped for Diethylphthalate and the %RSD was recalculated. The recalculated %RSD was 15.1%, which is within the acceptance criteria of less than 30%. Diethylphthalate results less than 50 ppb but greater than the IDL were qualified as estimated with a "J" by the data validator. The highest point of the calibration curve was dropped for 2,4,6-Trichlorophenol and the %RSD was recalculated. The recalculated %RSD was 7.2%, which is within the acceptance criteria of less than 30%. The 2,4,6-Trichlorophenol results greater than 160 ppb will be qualified as estimated with a "J" by the data validator. As per the National Functional Guidelines, if the %RSD is greater than the acceptance criteria of 30% then qualify detected results as estimated with "J".

B. Continuing Calibration

One CC dated 12/24/03 was analyzed in support of the semivolatile sample analyses reported in the data submissions. The RRF's for the CC dated 11/24/03 were within the acceptance criteria. The percent difference (%D) between the average RRF's and the CC Response Factors for the CC dated 11/26/03 were within the acceptance criteria with the exception the %D for 2,4-Dintrophenol. As per the National Functional Guidelines, if the %D exceeds the acceptance criteria qualify detected results for that analyte with "J" and non-detected results for that analyte with "UJ".

4. BLANKS

One laboratory semivolatile method blank was analyzed with this SDG. The results are summarized below.

Method Blank (MB136362)

Di-n-butyl phthalate (1.8 ppb) was detected in the method blank extracted on 12/16/03. The results for Di-n-butyl phthalate less than 18 ppb were qualified with "U" for samples extracted with method blank 136362. Bis (2-Ethylhexyl) phthalate (0.956 J ppb) was also detected in the method blank extracted on 12/16/03. The results for bis (2-Ethylhexyl) phthalate less than 9.56 ppb were qualified with "U" for samples extracted with method blank 136632.

5. SYSTEM MONITORING COMPOUND RECOVERY

All reported semivolatile system monitoring compounds were recovered within acceptable control limits.

6. MATRIX SPIKE/MATRIX SPIKE DUPLICATE (MS/MSD)

There were no samples submitted for MS/MSD analysis during this sampling event.

7. INTERNAL STANDARDS PERFORMANCE

Internal standard areas and retention times were within acceptable limits for the reported semivolatile sample analyses

8. COMPOUND IDENTIFICATION

All reported semivolatile constituents were correctly identified with supporting chromatograms present in the data package.

9. CONSTITUENT QUANTITATION AND REPORTED DETECTION LIMITS

Constituent quantitations were correctly calculated and reported for semivolatile constituents.

10. SYSTEM PERFORMANCE

The analytical system appears to have been working well at the time of these analyses, based on the evaluation of the raw data submitted for review.

11. DOCUMENTATION

The documentation appeared accurate and in order.

12. OVERALL ASSESSMENT

There was low-level Di-n-butylphthalate and bis (2-Ethylhexyl) phthalate contamination associated with the extraction analysis of the surface water samples. It should be noted that phthalates are a common laboratory. The presence of Di-n-butylphthalate and bis (2-Ethylhexyl) phthalate was mitigated in all of the groundwater samples. The results are acceptable with the validator-added qualifiers.

DATA VALIDATION SUMMARY – SAMPLE DELIVERY GROUP 20312150701 VOLATILE ORGANIC

Validation of the GC/MS volatile organics data, as prepared by Gulf Coast Analytical Laboratories (GCAL) for the samples collected from the Skinner Landfill site in November 2003, was conducted by Earth Tech using the National Functional Guidelines for Organic Data Review, (US EPA, October, 1999), as appropriate. These data were reported by GCAL under SDG 20312150701.

GCAL#	Sample Description
20312150701-01	SKSWD521008
20312150701-02	SKSWD52DUP1008
20312150701-03	SKSWD52FB1008
20312150701-04	SKSWD52TB1008

INTRODUCTION

Analyses were performed according to CLP-Organic Analysis Low Concentration OLC02.0 SOW. Results of the sample analyses are reported by the laboratory as either qualified or unqualified. Unqualified results mean that the reported values may be used without reservation. Various qualifier codes are used by the laboratory to denote specific information regarding the analytical results. The data validation process is intended to evaluate the data on a technical basis. The data package also was subjected to an internal laboratory quality review prior to submission to Earth Tech for data validation.

During the validation process, laboratory-qualified and unqualified data are verified against all available supporting documentation. Based on this evaluation, qualifier codes may be added, deleted or modified by the data user. Final results are therefore, either qualified or unqualified. Validator-qualified results are annotated with the following codes in accordance with the Functional Guidelines:

- U The constituent was analyzed for, but was not detected above the level of the associated analytical reporting limit. The associated value is either the sample quantitation limit or the sample detection limit.
- J The analyte was positively identified; the associated numerical value is the approximate concentration of the analyte in the sample.
- UJ The analyte was not detected above the reported sample quantitation limit.

However, the reported quantitation limit is approximate and may or may not represent the actual limit of quantitation necessary to accurately and precisely measure the analyte in the sample.

R The sample results are rejected due to serious deficiencies in the ability to analyze the sample and meet quality control criteria. The presence or absence of the analyte cannot be verified.

The volatiles data validation findings and conclusions are provided in the following sections of this report:

- 1. Holding Times
- 2. GC/MS Tuning
- 3. Calibration
 - A. IC
 - B. CC
- 4. Blanks
- 5. System Monitoring Compound Recovery
- 6. MS/MSD
- 7. Laboratory Control Sample
- 8. Internal Standards Performance
- 9. Compound Identification
- 10. Constituent Quantitation and Reported Detection Limits
- 11. System Performance
- 12. Documentation
- 13. Overall Assessment

1. HOLDING TIMES

All samples for Volatile Organic Compounds (VOC) analyses were analyzed within the 14-day technical holding time and the 10-day VTSR method holding time. The cooler temperature upon receipt at the laboratory was within the recommended temperature of 4°C +/- 2°C.

2. GC/MS TUNING

All samples were analyzed on a single GC/MS system, identified as MSV2. One bromofluorobenzene (BFB) tune was run. The BFB tune was acceptable.

3. CALIBRATION

A. Initial Calibration

One IC dated 12/16/03 was analyzed on Instrument MSV2 in support of the volatile sample analyses reported in the data submissions. Documentation of the IC standards was present in the data package, and RRF's as well as %RSD values were accurately reported. The criteria employed for technical data review purposes are different than those used in the method. The laboratory must meet a minimum RRF of 0.01; however, for data review purposes, a RRF criterion of "greater than or equal to 0.05" is applied to all volatile compounds. The %RSD's were within the acceptance criteria specified in the method for all target analytes. The RRF's and the average RRF for the IC dated 11/17/03 were within the acceptance criteria specified in the method for all target analytes with the exception of trans-1,2-Dichloroethene, Acetone, and 2-Butanone. As per the National Functional Guidelines, if any initial calibration RRF is less than 0.05, qualify positive results that have acceptable mass spectral identification with "J", using professional judgement, and non-detected analytes as unusable (R). The analyte 1,2-Dichloroethene as reported by GCAL consists of the summation of cis-1,2-Dichloroethene and trans-1,2-Dichloroethene. The RRF for cis-1,2-Dichloroethene were within the acceptance criteria therefore the data validator qualified the total 1,2-Dichloroethene result with "UJ" instead of rejecting the result.

B. Continuing Calibration

One CC dated 12/16/03 was analyzed on instrument MSV2 in support of the volatile sample analyses reported in the data submissions. The percent difference (%D) between the average RRF's and the CC RF's were within the acceptance criteria for all target analytes. The CC RRF's were within the acceptance criteria specified in the method for all target analytes with the exception of trans-1,2-Dichloroethene, Acetone and 2-Butanone. The trans-1,2-Dichloroethene, Acetone and 2-Butanone results were previously qualified under section 3A above.

4. BLANKS

One laboratory volatile method blank, storage blank, Trip Blank, and a Field Blank were analyzed with this SDG. The results are summarized below.

Method Blank

MB136071 (12/16/03)

Chloroform was detected at a concentration of 0.57 ppb in the method blank analyzed on 12/16/03.

Storage Blank (VHBLK01)

Chlorobenzene (0.63 ppb) and Acetone (1.9 ppb) were detected in the storage blank analyzed on 12/16/03

Trip Blank (SKSWD52TB1008)

There were no target analytes detected in the Trip Blank dated 12/11/03.

Field Blank (SKSWD52FB1008)

Acetone (16 ppb), Benzene (0.11 ppb), Methylene chloride (30 ppb), and Styrene (0.63 ppb) were detected in the Field Blank collected on 12/11 03.

5. SYSTEM MONITORING COMPOUND RECOVERY

All reported volatile system monitoring compounds were recovered within acceptable control limits for all samples.

6. MATRIX SPIKE/MATRIX SPIKE DUPLICATE

A matrix spike/matrix spike duplicate is not required when analyzing samples under the CLP SOW OLC02.0

7. LABORATORY CONTROL SAMPLE

A LCS/LCS duplicate were analyzed in conjunction with this SDG. Recoveries were within the control limit for all constituents.

8. INTERNAL STANDARDS PERFORMANCE

Internal Standard areas and retention times were within acceptable limits for the reported volatile sample analyses.

9. COMPOUND IDENTIFICATION

All reported VOCs were correctly identified with supporting chromatograms present in the data package.

10. CONSTITUENT QUANTITATION AND REPORTED DETECTION LIMITS

Constituent quantitations were correctly calculated and reported for VOCs.

11. SYSTEM PERFORMANCE

The analytical system appears to have been working well at the time of these analyses, based on the evaluation of the raw data.

12. **DOCUMENTATION**

The documentation appeared accurate and in order.

13. OVERALL ASSESSMENT

The results are acceptable with the validator-added qualifiers.

DATA VALIDATION SUMMARY - SAMPLE DELIVERY GROUP 20312150701 PESTICIDES

Validation of the Gas Chromatography (GC) pesticides data, as prepared by Gulf Coast Analytical Laboratories (GCAL) for the samples collected from the Skinner Landfill site in November 2003, was conducted by Earth Tech using the National Functional Guidelines for Organic Data Review, (US EPA, October, 1999), as appropriate. These data were reported by GCAL under SDG 20312156701.

GCAL#	Sample Description
20312150701-01	SKSWD521008
20312150701-02	SKSWD52DUP1008

INTRODUCTION

Analyses were performed according to CLP-Organic Analysis Multi-Media, Multi-Concentration OLM04.2 SOW. Results of the sample analyses are reported by the laboratory as either qualified or unqualified. Unqualified results mean that the reported values may be used without reservation. Various qualifier codes are used by the laboratory to denote specific information regarding the analytical results

The data validation process is intended to evaluate the data on a technical basis. The data package also was subjected to an internal laboratory quality review prior to submission to Earth Tech for data validation.

During the validation process, laboratory-qualified and unqualified data are verified against all available supporting documentation. Based on this evaluation, qualifier codes may be added, deleted or modified by the data user. Final results are therefore, either qualified or unqualified. Validator-qualified results are annotated with the following codes in accordance with the Functional Guidelines:

- U The constituent was analyzed for, but was not detected above the level of the associated analytical reporting limit. The associated value is either the sample quantitation limit or the sample detection limit.
- J The analyte was positively identified; the associated numerical value is the approximate concentration of the analyte in the sample.
- UJ The analyte was not detected above the reported sample quantitation limit. However, the reported quantitation limit is approximate and may or may not represent the actual limit of quantitation necessary to accurately and precisely measure the analyte in the sample.

R The sample results are rejected due to serious deficiencies in the ability to analyze the sample and meet quality control criteria. The presence or absence of the analyte cannot be verified.

Details of the pesticide data validation findings and conclusions are provided in the following sections of this report:

- 1. Holding Times
- 2. Gas Chromatograph/Electronic Capture Detector (GC/ECD) Instrument Performance Check
- 3. IC
- 4. Calibration Verification
- 5. Blanks
- 6. Surrogate Spikes
- 7. Matrix Spike/Matrix Spike Duplicate (MS/MSD)
- 8. Pesticide Cleanup Checks
- 9. Target Compound Identification
- 10. Constituent Quantitation and Reported Detection Limits
- 11. Documentation
- 12. Overall Assessment

1. HOLDING TIMES

All samples were extracted within the seven-day technical holding time and the five-day VTSR method holding time. The cooler temperature upon receipt at the laboratory was within the recommended temperature of 4°C +/- 2°C.

2. GC/ECD INSTRUMENT PERFORMANCE CHECK

The Performance Evaluation Mixture (PEM) was analyzed at the correct frequency. Absolute retention times were within limits.

The percent resolution between adjacent peaks was a jithin QC limits for the Pesticide Analyte Resolution Check with the except in of Lindosulfan sultate analyzed 12/01/03 on the confirmation column. There were no target analyte detected in the associated samples therefore data qualification was not warranted.

The percent resolution between adjacent peaks is within QC limits for the Performance Evaluation Mixtures (PEM). The percent breakdown for both 4,4-DDT and Endrin in each PEM was less than 20.0% for both GC columns. The combined percent breakdown for 4,4-DDT and Endrin in each PEM was less than 30.0% for both GC columns.

3. INITIAL CALIBRATION

Individual standard mixtures A and B were analyzed at the correct frequencies and concentrations. The percent resolution criterion was met for Individual standard mixtures A and B.

The Percent Relative Standard Deviation (%RSD) of the calibration factors for each of the single component pesticides was less than 20% with the exception of 4,4'-DDT (21.6%). As per the National Functional Guidelines up to two single component target pesticides (other than the surrogates) per column may exceed the 20.0 percent limit but the %RSD must be less than or equal to 30.0 percent.

The multi-component target compounds were analyzed separately on both columns at a single concentration level. Retention times were determined from a minimum of three peaks.

4. CALIBRATION VERIFICATION

Absolute retention times were within appropriate time retention windows

5. BLANKS

One laboratory method blank was analyzed with this SDG. The results are summarized below.

Method Blank 136076

No constituents were detected above the laboratory-reporting limit. This blank corresponds to all samples extracted on 12/16/03

6. SURROGATE SPIKES

Decachlorobiphenyl (DCB) and tetrachloro-m-xylene (TCX) surrogate spike recoveries were within the acceptance criteria for all samples.

7. MATRIX SPIKE/MATRIX SPIKE DUPLICATE

There were no samples submitted for MS MSD analysis during this sampling event.

8. PESTICIDE CLEANUP CHECKS

Recoveries of all pesticides and surrogates were within 80-120% for the lot of Florisil cartridges utilized for pesticide cleanup.

9. TARGET COMPOUND IDENTIFICATION

All reported pesticide data were correctly identified with supporting chromatograms present in the data package.

10. CONSTITUENT QUANTITATION AND REPORTED DETECTION LIMITS

Constituent quantitations were correctly calculated and reported for pesticide constituents.

11. DOCUMENTATION

The documentation appeared accurate and in order.

12. OVERALL ASSESSMENT

The results are acceptable with the validator-added qualifiers.

REFERENCES

US EPA, 1994. National Functional Guidelines for Inorgani. Data Review.

US EPA, 1999. National Functional Guidelines for Organic Data Review.



ANALYTICAL RESULTS

PERFORMED BY

GULF COAST ANALYTICAL LABORATORIES, INC.

Report Date 12/30/2003

GCAL Report 203121.

Deliver To Earth Tech 200 Vine Street Wilder, KY 41076 859-442-2300

Attn Pat Higgins

Customer Earth Tech

Project Skinner Landfill

000001

CASE NARRATIVE

Client: Earth Tech Report: 203121507

Gulf Coast Analytical Laboratories received and analyzed the sample(s) listed on the sample cross-reference page of this report. Receipt of the sample(s) is documented by the attached chain of custody. This applies only to the sample(s) listed in this report. No sample integrity or quality control exceptions were identified unless noted below.

VOLATILES MASS SPECTROMETRY

In the OLC02.1 - CLP Volatiles analysis, sample 20312150703 (SKSWD52FB1008) had to be diluted due to compounds that were detected above the linear range of the calibration.

SEMI-VOLATILES GAS CHROMATOGRAPHY

In the analysis of RESC01 on column-2, there was no resolution between Methoxychlor and Endosulfan Sulfate. There was no target analysis present in the associated samples. All peaks resolved on the primary column.

METALS

Zinc is flagged as estimated for samples associated with prep batch 266831 due to the fact that the percent difference between the original sample result and the serial dilution result is greater than ten. A chemical or physical interference is suspected.

In the Mercury analysis for prep batch 266832, the MS recovery was outside the control limits. The LCS recovery was within the control limits. This indicates the analysis is in control and the sample is affected by matrix interference.

MISCELLANEOUS

Sample 20312150705 (SKSWD521008 (DISSOLVED)) had to be preserved at the laboratory with Nitric Acid.

Laboratory Endorsement

Sample analysis was performed in accordance with approved methodologies provided by the Environmental Protection Agency or other recognized agencies. The samples and their corresponding extracts will be maintained for a period of 30 days unless otherwise arranged. Following this retention period the samples will be disposed in accordance with GCAL's Standard Operating Procedures.

Common Abbreviations Utilized in this Report

ND Indicates the result was Not Detected at the specified RDL

DO Indicates the result was Diluted Out

MI Indicates the result was subject to Matrix Interference Indicates the result was Too Numerous To Count

SUBC Indicates the analysis was Sub-Contracted

FLD Indicates the analysis was performed in the Field

PQL Practical Quantitation Limit
MDL Method Detection Limit
RDL Reporting Detection Limit

00:00 Reported as a time equivalent to 12:00 AM

Reporting Flags Utilized in this Report

J Indicates an estimated value

U Indicates the compound was analyzed for but not detected

B (ORGANICS) Indicates the analyte was detected in the associated Method Blank

B (INORGANICS) Indicates the result is between the RDL and MDL

Sample receipt at GCAL is documented through the attached chain of custody. In accordance with ISO Guide 25 and NELAC, this report shall be reporduced only in full and with the written permission of GCAL. The results contained within this report relate only to the samples reported. The documented results are presented within this report.

This report pertains only to the samples listed in the Report Sample Summary and should be retained as a permanent record thereof. The results contained within this report are intended for the use of the client. Any unauthorized use of the information contained in this report is prohibited.

I certify that this data package is in compliance with the terms and conditions of the contract and Statement of Work both technically and for completeness, for other than the conditions in the case narrative. Release of the data contained in this hardcopy data package and in the computer-readable data submitted has been authorized by the Quality Assurance Manager or his/her designee, as verified by the following signature.

CURTIS EKKER

DATA VALIDATION MANAGER GCAL REPORT 203121507

THIS REPORT CONTAINS 328 PAGES.

Report Sample Summary

GCAL ID	Client ID	Matrix	Collect Date/Time	Receive Date/Time
20312150701	SKSWD521008	Water	12 11/2003 13:52	12/13/2003 12:15
20312150702	SKSWD52DUP1008	Water	12/11/2003 15:05	12/13/2003 12:15
20312150703	SKSWD52FB1008	Water	12/11/2003 15:05	12/13/2003 12:15
20312150704	SKSWD52TB1008	Water	12/11/2003 00:00	12/13/2003 12:15
20312150705	SKSWD521008 (DISSOLVED)	Water	12/11/2003 13:52	12/13/2003 12:15
20312150706	SKSWD52DUP1008 (DISSOLVED)	Water	12/11/2003 15:05	12/13/2003 12:15

560.3

VOLATILE ORGANICS ANALYSIS DATA SHEET

Lab Name:	GCAL	Sample ID: SK	SWD521008	560-	<u>ــــــــــــــــــــــــــــــــــــ</u>
Lab Code:	LA024 Case No.:	Contract:			
Matrix: Wat	ter	SAS No.:	_	SDG No.: 20	3121507
Sample wt/vo	ol: 25 Units: mL	Lab Sample ID:	203121507	01	
Level: (low/m	ed)	Lab File ID: 203	31216/T1263	·	
% Moisture: r	not dec.	Date Collected:	12/11/03	Time: 1	352
	DB-624-30M ID: .53 (mm)	Date Received:	12/13/03		
Instrument ID		Date Analyzed:		Time: 1	651
Concentrated	Il Extract Volume: (µL)			Analyst:	
	'Olume: (μL)	Prep Method:		•	
	RATION UNITS: ug/L	Analytical Metho	d: OLC02.1	I - CLP Vo	
CAS NO.	COMPOUND	RESULT	Q	RL	
71-55-6	1,1,1-Trichloroethane	1.0	Ú	1.0]
79-34-5	1,1,2,2-Tetrachloroethane	1.0	U	1.0	1
79-00-5	1,1,2-Trichloroethane	1.0	U	1.0	1
75-34-3	1,1-Dichloroethane	1.0	U	1.0	1
75-35-4	1,1-Dichloroethene	1.0	Ü	1.0	1
120-82-1	1,2,4-Trichlorobenzene	1.0	U	1.0	ſ
106-93-4	1,2-Dibromoethane	1.0	U	1.0	
95-50-1	1,2-Dichlorobenzene	1.0	U	1.0	1
107-06-2	1,2-Dichloroethane	1.0	U	1.0	Í
540-59-0	1,2-Dichloroethene	1.0	U	1.0	us
78-87-5	1,2-Dichloropropane	1.0	U	1.0	{
541-73-1	1,3-Dichlorobenzene	1.0	U	1.0	1
106-46-7	1,4-Dichlorobenzene	1.0	U	1.0	
78-93-3	2-Butanone	5.0	U	5.0	R
591-78-6	2-Hexanone	5.0	U	5.0	
108-10-1	4-Methyl-2-pentanone	5.0	U	5.0	
67-64-1	Acetone	5.0	U	5:0	R
71-43-2	Benzene	1.0	U	1.0	, ,
75-27-4	Bromodichloromethane	1.0	U	1.0	
75-25-2	Bromoform	1.0	Ū	1.0	
74-83-9	Bromomethane	1.0	U	1.0	
75-15-0	Carbon disulfide	1.0	U	1.0	
56-23-5	Carbon tetrachloride	1.0	U	1.0	
108-90-7	Chlorobenzene	1.0	U	1.0	
75-00-3	Chloroethane	1.0	U	1.0	
67-66-3	Chloroform	1.0	U	1.0	
74-87-3	Chloromethane	1.0	U	1.0	,
124-48-1	Dibromochloromethane	1.0	U	1.0	
10061-01-5	cis-1,3-Dichloropropene	1.0	υ	1.0	
10061-02-6	trans-1,3-Dichloropropene	1.0	U	1.0	
100-41-4	Ethylbenzene	1.0	U	1.0	
75-09-2	Methylene chloride	2.0	U	2.0	
100-42-5	Styrene	1.0	U	1.0	
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NOUAT LE OFBANIOS ANALYSIS DYTA (HEET)

Lab Name: GCAL	Sample ID SKSWD521006 SKD - 5			
Lab Code: LA024 Case No.:	Contract:			
Matrix: Water	\$4\$ No.: SDG No.: 203 12*507			
Sample wi/vol: 25 Units m_	Lab Sample D 20312150701			
Level: (low/med)	Lab File ID: 2031216/T1263			
% Moisture: not dec.	Date Collected: 12/11/03 Time: 1352			
GC Column: D8-624-30M ID:53 (mm)	Date Received: 12/13/03			
Instrument ID: MSV2	Date Analyzed: 12/16/03 Time: 1651			
Concentrated Sxtract Volume: (µL)	Dilution Factor: 1 Analyst: RSP			
Soil Aliquot Volume: (µL)	Prep Method			
CONCENTRATION UNITS: Up1	Analytical Method: OLC02.1 - CLP Vo			
CAS NO. COMPOUND	RESULT Q RL			
127-18-4 Tetrachloroethene	1.0 U 1.0			
108-88-3 Toluene	1.0 U 1.0			
79-01-6 Trichloroethene	1.0 U 1.0			
75-01-4 Vinyl chloride	1 D U 1.0			
1330-20-7 Xylene (total)	1 0 U 1.0			

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VOLATILE ORGANICS ANALYSIS DATA SHEET TENTATIVELY IDENTIFIED COMPOUNDS

SAMPLE NO.
SKSWD521008
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Lab Name: GCAL	_Contract:				~ D - D
Lab Code: LA024 Case No.:		SAS No.:	SDG	No.: 203	3121507
Matrix: Water		Lab Sample ID:	20312150701		
Sample wt/vol: Units:		Lab File ID: 20	31216/T1263		
Level: (low/med)		Date Collected:	12/11/03	Time:	1352
% Moisture: not dec.		Date Received:	12/13/03	· · · · · · · · · · · · · · · · · · ·	
GC Column: DB-624-30M ID: .53	(mm)	Date Analyzed:	12/16/03	Time:	1651
Instrument ID: MSV2		Dilution Factor:	1	Analyst	RSP
Soil Extract Volume:	(µL)				
Soil Aliquot Volume:	(μL)				
Number TICs Found: 1 CONCENTRATION UNITS: CAS NO. COMPOUND		· RT	EST. COI	NC.	Q
1 . 7446-09-5 Sulfur dioxide		1.443	432		

43 NOUSTILE ORGENIOTANISUKS SIDSTAISHEET

.at Name.	GCAL	997: a (D) 🔤	SWD52DUP1	C38 ミャク・			
Lab Code:	LA024 Case No.	Carrade					
Matric Water		S-S No :		SDG No.: 203121507	3 No.: 203121507		
Sample wt/v	olt 25 Units: mL	Lab Sample ID:	2031215070	2			
Levet (low/m	ned)	Lat File ID: 20	31216/T1265				
% Moisture:		Date Collected:	12/11/03	Time: 1505			
GC Column:	DB-624-30M ID: .53 (тит)	Date Received:	12/13/03				
instrument (C				Time: 1739			
Concentrated	di Extract Volume: (µL)	Dilution Factor:	Analyst RSP				
	/olume: (µL)						
		- Analytical Metho					
	RATION UNITS: Ug/L						
CAS NO.	. COMPOUND	RESULT	Q	RL			
71-55-6	1,1,1-Trichloroethane	1,0	U	1.0			
79-34-5	1,1,2,2-Tetrachlorcetrane	1.5	U	1,0			
79-00-5	1,1,2-Trichloroethane	1.0	U	1.0			
75-34-3	1,1-Dichloroethane	1.0	U	1.0			
75-35-4	1,1-Dichloroethene	1.5	U	1.0			
120-82-1	1,2,4-Trichlorobenzere	1.0	U	1.0			
106-93-4	1,2-Dibromoethane	1.2	U	1.0			
95-50-1	1,2-Dichlorobenzene	1.3	U	1.0			
107-06-2	1,2-Dichloroethane	1.0	υ	1.0			
540-59-0	1,2-Dichloroethene	1.0	U	1.0 UJ			
78-87-5	1,2-Dichloroprocane	1.0	U	1.0			
541-73-1	1,3-Dichlorobenzene	10	U	1.0			
106-46-7	1,4-Dichlorobenzene	1.0	U	1.0			
78-93-3	2-Butanone	5.5	U	5.0			
591-78-6	2-Hexanone	5.0	U	5.0			
106-10-1	4-Methyl-2-pentarione	5.0	U	5.0			
67-64-1	Acetone	5.0	U	5.0 R			
71-43-2	Benzene	1.0	ָ ט	1,0			
75-27-4	Bromodichlorome hane		U	1.0			
75-25-2	Bromoform	1.5	U	1.0			
74-83-9	Bromomethane	10	U	1.0			
75-15-0	Carbon disulfide	1:	Ü	1.0			
56-23-5	Carbon tetrach onde	1 0	U	1.0			
108-90-7	Chlorobenzene	1:	U	1.0			
75-00-3	Chloroethane	1.3	U	1.0			
67-66-3	Chlaroform	1.0	U	1.0			
74-87-3	Chloromethane	10	U	1.0	-		
124-48-1	Dibromochioromethane	10	U	1.0			
	cis-1,3-Dichioropropene	1:	Ü	1.0			
	trans-1,3-Dichloropropene	1.2	J -	1.0			
100-41-4	Ethylbenzene	12	 	1.0			
75-09-2	Methylene chlorde	2:	U	2.0			
100-42-5	Styrene	1:	U U	1.0			

215/J

1A . VOLATILE ORGANICS ANALYSIS DATA SHEET

Lab Name: GCAL	Sample ID: SKSWD52DUP1008 540-0				
Lab Code: LA024 Case No.:	Contract:				
Matrix: Water	SAS No.: SDG No.: 203121507				
Sample wt/vol: 25 Units: mL	Lab Sample ID: 20312150702				
Level: (low/med)	Lab File ID: 2031216/T1265				
% Moisture: not dec.	Date Collected: 12/11/03 Time: 1505				
GC Column: DB-624-30M ID: .53 (mm)	Date Received: 12/13/03				
Instrument ID: MSV2	Date Analyzed: 12/16/03 Time: 1739				
Concentrated Extract Volume: (µL)	Dilution Factor: 1 Analyst: RSP				
Soil Aliquot Volume: (µL)	Prep Method:				
CONCENTRATION UNITS: ug/L	Analytical Method: OLC02.1 - CLP Vo				
CAS NO. COMPOUND	RESULT Q RL				
127-18-4 Tetrachioroethene	1.0 U 1.0				
108-88-3 Toluene	1.0 U 1.0				
79-01-6 Trichloroethene	1.0 U 1.0				
75-01-4 Vinyl chloride	1.0 U 1.0				
1330-20-7 Xylene (total)	1.0 U 1.0				

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VOLATILE DRIGAN OS ANALYS SIDATA SHEET TENTAT VELY IDENTIF ED COMPOUNDS

SAMPLE NO.

SKSWD52DUP1008

SWB-B

Lab Name: GCAL	Contract) W D J
Lab Code: LA324 Case No.:		SAS No :	s	NDG No.: <u>223</u>	1121507
Matric Water		Lab Sample ID:	20312150702		
Sample wt/vol: Units:		Lab File ID. 20	31216/ T1265		
Level: (low/med)		Date Collected	12/11/03	Time: _	1505
% Moisture: not dec.		Date Received:	12/13/03		
GC Column: DB-624-30M !D: .53	(மரு)	Date Analyzed:	12/16/03	Time: _	1739
Instrument ID: MSV2		Dirution Factor:	1	Analyst	RSP
Soil Extract Volume:	(µL)				
Soil Aliquot Volume:	(µL)				
Number TICs Found: 1					
CONCENTRATION UNITS:					
CAS NO. COMPOUND		RT	EST. C	CONC.	Q
1 . 7446-09-5 Sulfur dioxide		* 443	36	6	

1A VOLATILE ORGANICS ANALYSIS DATA SHEET

Lab Name:	GCAL	Sample ID: SK	SWD52FB100	08		
Lab Code:	LA024 Case No.:	Contract:				
Matrix: Water		SAS No.:		SDG No.:	SDG No.: 203121507	
Sample wt/vo	ol: 25 Units: mL	Lab Sample ID: 20312150703				
	ned)	Lab File ID: 203	31216/T1266			
	not dec.	Date Collected:	12/11/03	Time:	1505	
	DB-624-30M iD: .53 (mm)	Date Received:	12/13/03			
Instrument iC	D: MSV2	Date Analyzed:	12/16/03	Time:	1804	
Concentrated	dl Extract Volume: (µL)	Dilution Factor:	2 Analyst: RSP			
Soil Aliquot V	/olume: (µL)	Prep Method:				
CONCENT	RATION UNITS: ug/L	Analytical Metho				
	COMPOUND	RESULT	Q	RL		
71-55-6	1,1,1-Trichloroethane	2.0		2.0	7	
79-34-5	1,1,2,2-Tetrachloroethane	2.0	 	2.0	-{	
79-00-5	1,1,2-Trichloroethane	2.0	1-0-1	2,0	-{	
75-34-3	1,1-Dichloroethane	2.0	 	2.0		
75-35-4	1,1-Dichloroethene	2.0	1 0	2.0	-{	
120-82-1	1,2,4-Trichlorobenzene	2.0	1 0	2.0	-{	
106-93-4	1.2-Dibromoethane	2.0	1 0	2,0	-}	
95-50-1	1,2-Dichlorobenzene	2.0	l u l	2.0	-	
107-06-2	1,2-Dichloroethane	2.0	 	2.0	-	
540-59-0	1,2-Dichloroethene	2.0	l	2.0	1 11 1	
78-87-5	1,2-Dichloropropane	2.0	 	2.0	-	
541-73-1	1,3-Dichlorobenzene	2.0	1 0 1	2.0	-1	
106-46-7	1,4-Dichlorobenzene	2.0	Ü	2.0	-	
78-93-3	2-Butanone	10	l u	10	TR	
591-78-6	2-Hexanone	10	U	10	⊣"	
108-10-1	4-Methyl-2-pentanone	10	U	10	7	
67-64-1	Acetone	16	 	10	15	
71-43-2	Benzene	0.11	 	2.0	-{-	
75-27-4	Bromodichloromethane	2.0	U	2.0	7	
75-25-2	Bromoform	2.0	U	2.0	7	
74-83-9	Bromomethane	2.0	U	2.0	7	
75-15-0	Carbon disulfide	2.0	U	2.0	7	
56-23-5	Carbon tetrachloride	2.0	U	2.0	7	
108-90-7	Chlorobenzene	2.0	Ü	2.0	7	
75-00-3	Chloroethane	2.0	U	2.0	7	
67-66-3	Chloroform	2.0	U	2.0	7	
74-87-3	Chloromethane	2.0	U	2.0	7	
124-48-1	Dibromochloromethane	2.0	U	2.0	7	
10061-01-5	cis-1,3-Dichloropropene	2.0	Ü	2.0	7	
10061-02-6	trans-1,3-Dichloropropene	2.0	U	2.0	7	
100-41-4	Ethylbenzene	2.0	U	2.0	7	
75-09-2	Methylene chloride	30		4.0	7	
100-42-5	Styrene	0.63	J	2.0	7	
						

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CLATUE CRIGANIOS AN JUNSIS DATA SHEET

Lab Name: GCAL	Sample ID. SFSWD52FB1008			
Lab Code: LA324 Case No.:	Contract			
Matric Water	SAS No.: SDG No.: 203121507			
Sample wt/vol: 25 Units mi.	Lab Sample D: 20312150703			
Levet (low/med)	Lab File ID: 20 31216/T1266			
% Moisture: not dec.	Date Collected: 12/11/03 Time: 1505			
GC Column: <u>DB-624-30M</u> ID: .53 (m	im) Date Received: 12/13/03			
Instrument ID: MSV2	Date Analyzed: 12/16/03 Time: 1804			
Concentratedi Extract Volume: (µ	L) Dilution Factor: 2 Analyst: RSP			
Soil Aliquot Volume: (µ	L) Prep Method:			
CONCENTRATION UNITS: Up!	Analytical Method: OLC02.1 - CLP Vo			
CAS NO. COMPOUND	RESULT Q RL			
127-18-4 Tetrachioroethene	2.0 U 2.0			
108-88-3 Toluene	2 C U 2.0			
79-01-6 Trichloroethene	2 0 U 2.0			
75-01-4 Vinyl chloride	2 0 U 2.0			
1220 20 7 Videos Dotall	30			

1A VOLATILE ORGANICS ANALYSIS DATA SHEET

Lab Code: LA024 Case No.: SDG No.: 203121507	Lab Name:	GCAL	Sample ID: SKSWD52TB1008 Contract:						
Sample w/voi: 25	Lab Code:	LA024 Case No.:							
Level: (Iow/med) Lab File ID: 2031216/T1262	Matrix: Water			SAS No.: SDG No.: 203121507					
% Moisture: not dec. Date Collected: 12/11/03 Time: 0000 GC Column: DB-624-30M ID: _53 (mm) Date Received: 12/13/03 Instrument ID: MSV2 Date Analyzed: 12/16/03 Time: 1627 Concentrated Extract Volume: (μL) Prep Method: 1 Analyst: RSP Soil Aliquot Volume: (μL) Prep Method: Analytical Method: OLC02.1 - CLP Vo CONCENTRATION UNITS: ug/L Analytical Method: OLC02.1 - CLP Vo CAS NO. COMPOUND RESULT Q RL 71-55-6 1,1,1-Trichloroethane 1.0 U 1.0 79-34-5 1,1,2-Trichloroethane 1.0 U 1.0 79-35-5 1,1-Dichloroethane 1.0 U 1.0 75-34-3 1,1-Dichloroethane 1.0 U 1.0 75-35-4 1,2-Dichloroethane 1.0 U 1.0 72-08-2-5 1,2-Dichloroethane 1.0 U 1.0 1,2-Dichloroethane 1.0 U	Sample wt/vol: 25 Units: mL			Lab Sample ID:	2031215070	4	······································		
GC Column: DB-624-30M ID:53 (mm) Date Received: 12/13/03 Time: 1627	Level: (low/m	ned)		Lab File ID: 203	31216/T1262				
Instrument D: MSV2				Date Collected:	12/11/03	Time:	0000		
Concentrated Extract Volume: (μL) Dilution Factor: 1 Analyst: RSP	GC Column:	DB-624-30M ID: .53	(mm)	Date Received:	12/13/03				
Analytical Method: CONCENTRATION UNITS: ug/L Analytical Method: OLC02.1 - CLP Vo	Instrument ID: MSV2		~~~	Date Analyzed:	ed: 12/16/03 Time: 1627				
CONCENTRATION UNITS: ug/L CAS NO. COMPOUND RESULT Q RL	Concentrated	di Extract Volume:	(µL)	Dilution Factor:	ıtion Factor: 1 Analyst: RSP				
CAS NO. COMPOUND RESULT Q RL 71-55-6 1,1,1-Trichicroethane 1.0 U 1.0 79-34-5 1,1,2-Tetrachicroethane 1.0 U 1.0 79-34-5 1,1,2-Tetrachicroethane 1.0 U 1.0 79-00-5 1,1,2-Trichicroethane 1.0 U 1.0 75-34-3 1,1-Dichicroethane 1.0 U 1.0 75-35-4 1,1-Dichicroethane 1.0 U 1.0 75-35-4 1,1-Dichicroethane 1.0 U 1.0 106-93-4 1,2-Dichicroethane 1.0 U 1.0 106-93-4 1,2-Dichicroethane 1.0 U 1.0 106-93-4 1,2-Dichicroethane 1.0 U 1.0 107-06-2 1,2-Dichicroethane 1.0 U 1.0 107-06-2 1,2-Dichicroethane 1.0 U 1.0 78-87-5 1,2-Dichicroethane 1.0 U 1.0 78-87-5 1,2-Dichicroethane 1.0 U 1.0 78-87-5 1,2-Dichicroethane 1.0 U 1.0 78-87-5 1,2-Dichicroethane 1.0 U 1.0 78-93-3 2-Butanone 1.0 U 1.0 78-93-3 2-Butanone 5.0 U 5.0 71-43-2 Benzene 1.0 U 1.0 75-27-4 Bromodichicromethane 1.0 U 1.0 75-27-4 Bromodichicromethane 1.0 U 1.0 75-27-5 Bromodichicromethane 1.0 U 1.0 75-23-5 Carbon tetrachloride 1.0 U 1.0 75-03-3 Chloroethane 1.0 U 1.0 75-03-3 Chloroethane 1.0 U 1.0 75-03-3 Chloroethane 1.0 U 1.0 75-03-3 Chloroethane 1.0 U 1.0 75-03-2 Methylene chlorida 2.0 U 2.0	Soil Aliquot V	/olume:	(μL)	Prep Method:		····	····		
71-55-6	CONCENT	RATION UNITS: ug/L		Analytical Metho	d: OLC02.1	- CLP Vo	·		
Type	CAS NO.	COMPOUND		RESULT	Q	RL			
79.00-5	71-55-6	1,1,1-Trichloroethane		1.0	U	1.0	7		
75-34-3	79-34-5	1,1,2,2-Tetrachloroethane		1.0	U	1,0	7		
75-35-4	79-00-5	1,1,2-Trichloroethane		1.0	U	1,0			
120-82-1	75-34-3	1,1-Dichloroethane		1.0	U	1.0	7		
106-93-4 1,2-Dibromoethane 1.0	75-35-4	1,1-Dichloroethene		1.0	U	1.0	7		
95-50-1 1,2-Dichlorobenzene 1.0	120-82-1	1,2,4-Trichlorobenzene		1.0	U	1.0			
107-06-2	106-93-4	1,2-Dibromoethane		1.0	U	1.0	7		
540-59-0 1,2-Dichloroethene 1.0	95-50-1	1,2-Dichlorobenzene		1.0	U	1.0	7		
78-87-5	107-06-2	1,2-Dichloroethane		1.0	U	1.0			
541-73-1 1,3-Dichlorobenzene 1.0 U 1.0 106-46-7 1,4-Dichlorobenzene 1.0 U 1.0 78-93-3 2-Butanone 5.0 U 5.0 591-78-6 2-Hexanone 5.0 U 5.0 108-10-1 4-Methyl-2-pentanone 5.0 U 5.0 67-64-1 Acetone 5.0 U 5.0 71-43-2 Benzene 1.0 U 1.0 75-27-4 Bromodichloromethane 1.0 U 1.0 75-25-2 Bromoffm 1.0 U 1.0 74-83-9 Bromomethane 1.0 U 1.0 75-15-0 Carbon disulfide 1.0 U 1.0 56-23-5 Carbon tetrachloride 1.0 U 1.0 108-90-7 Chlorobenzene 1.0 U 1.0 75-00-3 Chloroform 1.0 U 1.0 74-87-3 Chloroform 1.0 U 1.0 106-1-02-6 trans-1,3-Dichloropropene 1.0 U 1.0	540-59-0	1,2-Dichloroethene		1.0	U	1.0	Tu 3		
106-46-7 1,4-Dichlorobenzene 1.0 U 1.0 78-93-3 2-Butanone 5.0 U 5.0 591-78-6 2-Hexanone 5.0 U 5.0 108-10-1 4-Methyl-2-pentanone 5.0 U 5.0 67-64-1 Acetone 5.0 U 5.0 71-43-2 Benzene 1.0 U 1.0 75-27-4 Bromodichloromethane 1.0 U 1.0 75-25-2 Bromoform 1.0 U 1.0 74-83-9 Bromomethane 1.0 U 1.0 75-15-0 Carbon disulfide 1.0 U 1.0 56-23-5 Carbon tetrachloride 1.0 U 1.0 108-90-7 Chlorobenzene 1.0 U 1.0 75-00-3 Chloroform 1.0 U 1.0 74-87-3 Chloroform 1.0 U 1.0 74-87-3 Chloromethane 1.0 U 1.0	78-87-5	1,2-Dichloropropane		1.0	U	1.0	7		
78-93-3 2-Butanone 5.0 U 5.0 K	541-73-1	1,3-Dichlorobenzene		1.0	U	1.0	٦		
591-78-6 2-Hexanone 5.0 U 5.0 108-10-1 4-Methyl-2-pentanone 5.0 U 5.0 67-64-1 Acetone 5.0 U 5.0 71-43-2 Benzene 1.0 U 1.0 75-27-4 Bromodichloromethane 1.0 U 1.0 75-25-2 Bromoform 1.0 U 1.0 74-83-9 Bromomethane 1.0 U 1.0 75-15-0 Carbon disulfide 1.0 U 1.0 56-23-5 Carbon tetrachloride 1.0 U 1.0 108-90-7 Chlorobenzene 1.0 U 1.0 75-00-3 Chloroethane 1.0 U 1.0 67-66-3 Chloroform 1.0 U 1.0 74-87-3 Chloromethane 1.0 U 1.0 124-48-1 Dibromochloromethane 1.0 U 1.0 10061-02-6 trans-1,3-Dichloropropene 1.0 U <	106-46-7	1,4-Dichlorobenzene	·	1.0	U	1.0	7		
108-10-1 4-Methyl-2-pentanone 5.0 U 5.0 67-64-1 Acetone 5.0 U 5.0 71-43-2 Benzene 1.0 U 1.0 75-27-4 Bromodichloromethane 1.0 U 1.0 75-25-2 Bromoform 1.0 U 1.0 74-83-9 Bromomethane 1.0 U 1.0 75-15-0 Carbon disulfide 1.0 U 1.0 56-23-5 Carbon tetrachloride 1.0 U 1.0 108-90-7 Chlorobenzene 1.0 U 1.0 75-00-3 Chloroethane 1.0 U 1.0 67-66-3 Chloroform 1.0 U 1.0 74-87-3 Chloromethane 1.0 U 1.0 124-48-1 Dibromochloromethane 1.0 U 1.0 10061-02-6 trans-1,3-Dichloropropene 1.0 U 1.0 100-41-4 Ethylbenzene 1.0 U 1.0 75-09-2 Methylene chloride 2.0 U 2.0<	78-93-3	2-Butanone		5.0	U	5.0	T R		
67-64-1 Acetone 5.0 U 5.0 F 71-43-2 Benzene 1.0 U 1.0 U 1.0 T 1.0 U 1.0 U </td <td>591-78-6</td> <td>2-Hexanone</td> <td></td> <td>5.0</td> <td>U</td> <td>5.0</td> <td>7</td>	591-78-6	2-Hexanone		5.0	U	5.0	7		
71-43-2 Benzene 1.0 U 1.0 75-27-4 Bromodichloromethane 1.0 U 1.0 75-25-2 Bromoform 1.0 U 1.0 74-83-9 Bromomethane 1.0 U 1.0 75-15-0 Carbon disulfide 1.0 U 1.0 56-23-5 Carbon tetrachloride 1.0 U 1.0 108-90-7 Chlorobenzene 1.0 U 1.0 75-00-3 Chloroethane 1.0 U 1.0 67-66-3 Chloroform 1.0 U 1.0 74-87-3 Chloromethane 1.0 U 1.0 124-48-1 Dibromochloromethane 1.0 U 1.0 10061-02-6 trans-1,3-Dichloropropene 1.0 U 1.0 10061-01-5 cis-1,3-Dichloropropene 1.0 U 1.0 100-41-4 Ethylbenzene 1.0 U 1.0 75-09-2 Methylene chloride 2.0 <t< td=""><td>108-10-1</td><td>4-Methyl-2-pentanone</td><td></td><td>5.0</td><td>U</td><td>5.0</td><td>٦.</td></t<>	108-10-1	4-Methyl-2-pentanone		5.0	U	5.0	٦.		
75-27-4 Bromodichloromethane 1.0 U 1.0 75-25-2 Bromoform 1.0 U 1.0 74-83-9 Bromomethane 1.0 U 1.0 75-15-0 Carbon disulfide 1.0 U 1.0 56-23-5 Carbon tetrachloride 1.0 U 1.0 108-90-7 Chlorobenzene 1.0 U 1.0 75-00-3 Chloroethane 1.0 U 1.0 67-66-3 Chloroform 1.0 U 1.0 74-87-3 Chloromethane 1.0 U 1.0 124-48-1 Dibromochloromethane 1.0 U 1.0 10061-02-6 trans-1,3-Dichloropropene 1.0 U 1.0 10061-01-5 cis-1,3-Dichloropropene 1.0 U 1.0 100-41-4 Ethylbenzene 1.0 U 1.0 75-09-2 Methylene chloride 2.0 U 2.0	67-64-1	Acetone		5.0	U	5.0	TR		
75-25-2 Bromoform 1.0 U 1.0 74-83-9 Bromomethane 1.0 U 1.0 75-15-0 Carbon disulfide 1.0 U 1.0 56-23-5 Carbon tetrachloride 1.0 U 1.0 108-90-7 Chlorobenzene 1.0 U 1.0 75-00-3 Chloroethane 1.0 U 1.0 67-66-3 Chloroform 1.0 U 1.0 74-87-3 Chloromethane 1.0 U 1.0 124-48-1 Dibromochloromethane 1.0 U 1.0 10061-02-6 trans-1,3-Dichloropropene 1.0 U 1.0 10061-01-5 cis-1,3-Dichloropropene 1.0 U 1.0 100-41-4 Ethylbenzene 1.0 U 1.0 75-09-2 Methylene chloride 2.0 U 2.0		Benzene		1.0	U	1.0	7		
74-83-9 Bromomethane 1.0 U 1.0 75-15-0 Carbon disulfide 1.0 U 1.0 56-23-5 Carbon tetrachloride 1.0 U 1.0 108-90-7 Chlorobenzene 1.0 U 1.0 75-00-3 Chloroethane 1.0 U 1.0 67-66-3 Chloroform 1.0 U 1.0 74-87-3 Chloromethane 1.0 U 1.0 124-48-1 Dibromochloromethane 1.0 U 1.0 10061-02-6 trans-1,3-Dichloropropene 1.0 U 1.0 10061-01-5 cis-1,3-Dichloropropene 1.0 U 1.0 100-41-4 Ethylbenzene 1.0 U 1.0 75-09-2 Methylene chloride 2.0 U 2.0	75-27-4	Bromodichloromethane		1.0	U	1.0			
75-15-0 Carbon disulfide 1.0 U 1.0 56-23-5 Carbon tetrachloride 1.0 U 1.0 108-90-7 Chlorobenzene 1.0 U 1.0 75-00-3 Chloroethane 1.0 U 1.0 67-66-3 Chloroform 1.0 U 1.0 74-87-3 Chloromethane 1.0 U 1.0 124-48-1 Dibromochloromethane 1.0 U 1.0 10061-02-6 trans-1,3-Dichloropropene 1.0 U 1.0 10061-01-5 cis-1,3-Dichloropropene 1.0 U 1.0 100-41-4 Ethylbenzene 1.0 U 1.0 75-09-2 Methylene chloride 2.0 U 2.0		Bromoform		1.0		1.0			
56-23-5 Carbon tetrachloride 1.0 U 1.0 108-90-7 Chlorobenzene 1.9 U 1.0 75-00-3 Chloroethane 1.0 U 1.0 67-66-3 Chloroform 1.0 U 1.0 74-87-3 Chloromethane 1.0 U 1.0 124-48-1 Dibromochloromethane 1.0 U 1.0 10061-02-6 trans-1,3-Dichloropropene 1.0 U 1.0 10061-01-5 cis-1,3-Dichloropropene 1.0 U 1.0 100-41-4 Ethylbenzene 1.0 U 1.0 75-09-2 Methylene chloride 2.0 U 2.0	74-83-9	Bromomethane		1.0	U	1.0]		
108-90-7 Chlorobenzene 1.0 U 1.0 75-00-3 Chloroethane 1.0 U 1.0 67-66-3 Chloroform 1.0 U 1.0 74-87-3 Chloromethane 1.0 U 1.0 124-48-1 Dibromochloromethane 1.0 U 1.0 10061-02-6 trans-1,3-Dichloropropene 1.0 U 1.0 10061-01-5 cis-1,3-Dichloropropene 1.0 U 1.0 100-41-4 Ethylbenzene 1.0 U 1.0 75-09-2 Methylene chloride 2.0 U 2.0	75-15-0	Carbon disulfide							
75-00-3 Chloroethane 1.0 U 1.0 67-66-3 Chloroform 1.0 U 1.0 74-87-3 Chloromethane 1.0 U 1.0 124-48-1 Dibromochloromethane 1.0 U 1.0 10061-02-6 trans-1,3-Dichloropropene 1.0 U 1.0 10061-01-5 cis-1,3-Dichloropropene 1.0 U 1.0 100-41-4 Ethylbenzene 1.0 U 1.0 75-09-2 Methylene chloride 2.0 U 2.0		Carbon tetrachloride			L	1.0	_]		
67-66-3 Chloroform 1.0 U 1.0 74-87-3 Chloromethane 1.0 U 1.0 124-48-1 Dibromochloromethane 1.0 U 1.0 10061-02-6 trans-1,3-Dichloropropene 1.0 U 1.0 10061-01-5 cis-1,3-Dichloropropene 1.0 U 1.0 100-41-4 Ethylbenzene 1.0 U 1.0 75-09-2 Methylene chloride 2.0 U 2.0				1.0		1.0			
74-87-3 Chloromethane 1.0 U 1.0 124-48-1 Dibromochloromethane 1.0 U 1.0 10061-02-6 trans-1,3-Dichloropropene 1.0 U 1.0 10061-01-5 cis-1,3-Dichloropropene 1.0 U 1.0 100-41-4 Ethylbenzene 1.0 U 1.0 75-09-2 Methylene chloride 2.0 U 2.0		Chloroethane							
124-48-1 Dibromochloromethane 1.0 U 1.0 10061-02-6 trans-1,3-Dichloropropene 1.0 U 1.0 10061-01-5 cis-1,3-Dichloropropene 1.0 U 1.0 100-41-4 Ethylbenzene 1.0 U 1.0 75-09-2 Methylene chloride 2.0 U 2.0	<u> </u>						_		
10061-02-6 trans-1,3-Dichloropropene 1.0 U 1.0 10061-01-5 cis-1,3-Dichloropropene 1.0 U 1.0 100-41-4 Ethylbenzene 1.0 U 1.0 75-09-2 Methylene chloride 2.0 U 2.0							_]		
10061-01-5 cis-1,3-Dichloropropene 1.0 U 1.0 100-41-4 Ethylbenzene 1.0 U 1.0 75-09-2 Methylene chloride 2.0 U 2.0									
100-41-4 Ethylbenzene 1.0 U 1.0 75-09-2 Methylene chloride 2.0 U 2.0		<u> </u>	·				_		
75-09-2 Methylene chloride 2.0 U 2.0	L						_		
<u></u>		<u> </u>					_		
100-42-5 Styrene 1.0 U 1.0									
	100-42-5	Styrene		1.0	U	1,0			

NOLAT LE CINGANICS ANNO 11 SIDATA SHEET

Lab Name: GCAL		StimpeiD: St	SWD52TB100	08	
Lab Code: LA024 Case No.:		Contract:			
Matrix: Water		SAS No :		SDG No.:	203121507
Sample wt/volt: 25 Units: mu		Lac Sample ID	2031 215070	4	
Level: (lowlned)		Lat File ID: 20	31216/T1 262		
% Moisture: not dec.		Date Collected	12'11/03	Time:	0000
GC Column: DB-624-30M ID: .53 (ന്നാ)	Date Received:	12/13/03	<u></u>	
Instrument ID: MSV2		Date Analyzed:	12/16/03	Time:	1627
Concentrated Extract Volume: (μL)	Dilution Factor:	1	Analyst	RSP
Sail Aliquot Volume: (μL)	Prep Method: _			
CONCENTRATION UNITS: ug1.		Analytical Metho	d: <u>OLC02.1</u>	-CLP Vo	
CAS NO. COMPOUND		RESULT	Q	RL	
127-18-4 Tetrachloroethene		1.0	U	1.0	
108-88-3 Toluene		1.0	U	1.0	7
79-01-6 Trichloroethene		1.0	υ	1.0	
75-01-4 Vinyl chloride		1.C	U	1.0	1
1330-20-7 Xviene (total)		1.6	11	1.0	7

18 SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

Lab Name:	GCAL		Sample ID: _S	KSWD5210	008	5 LD.3
Lab Code:	LA024 Case No.:		Contract:			
Matrix: W			SAS No.:		SDG No.:	203121507
Sample wt/v	vol: 1000 Units: mL		Lab Sample ID			e ID: 2031224/S
	med)		Date Collected			1352
	decanted: (Y/N)		Date Received	: 12/13/03	 	
	: DB-5MS-30M ID: .25		Date Analyzed	: 12/24/03	Time:	1908
Concentrate	d Sample Volume: 1000	(μL)	Dilution Factor	: _1	Analy	st: RLW
	Volume:		Prep Method:			
	fume: 2		Analytical Meth			
GPC Clean	эр: (Y/N) N pH:		Instrument ID:	MSSV2		
CONCENT	RATION UNITS: ug/L					
CAS NO.	COMPOUND		RESULT	Q	RL	
95-95-4	2,4,5-Trichlorophenol		10.0	-	10.0	1
88-06-2	2,4,6-Trichlorophenol		10.0	U	10.0	-
120-83-2	2,4-Dichlorophenol		10.0	<u>-</u>	10.0	-
51-28-5	2,4-Dinitrophenol		25.0	-	25.0	143
121-14-2	2,4-Dinitrotoluene		10.0	- i	10.0	ב יין
606-20-2	2,6-Dinitrotoluene		10.0	U	10.0	1
91-58-7	2-Chloronaphthalene		10.0	Ū	10.0	†
95-57-8	2-Chlorophenol		10.0	Ü	10.0	1
91-57-6	2-Methylnaphthalene		10.0	U	10.0	' j
88-74-4	2-Nitroaniline		25.0	U	25.0	1
88-75-5	2-Nitrophenol		10.0	Ü	10.0	1
91-94-1	3,3'-Dichlorobenzidine		10.0		10.0	1
99-09-2	3-Nitroaniline		25.0	U	25.0	1
534-52-1	2-Methyl-4,6-dinitrophenol		25.0	U	25.0	1
59-50-7	4-Chloro-3-methylphenoi		10.0	U	10.0	1
106-47-8	4-Chloroaniline		10.0	Ų	10.0	ļ ·
7005-72-3	4-Chlorophenyi-phenylether		10.0	U	10.0	1
106-44-5	4-Methylphenol (p-Cresol)		10.0	U	10.0	1
83-32-9	Acenaphthene		10.0	U	10.0	1
208-96-8	Acenaphthylene		10.0	U	10.0	1
120-12-7	Anthracene		10.0	U	10.0]
56-55-3	Benzo(a)anthracene		10.0	U	10.0]
50-32-8	Benzo(a)pyrene		10.0	U	10.0]
205-99-2	Benzo(b)fluoranthene		10.0	U	10.0]
191-24-2	Benzo(g,h,i)perylene		10.0	U	10.0	
207-08-9	Benzo(k)fluoranthene		10.0	U	10.0	}
111-91-1	Bis(2-Chloroethoxy)methane		10.0	U	10.0	
111-44-4	Bis(2-Chloroethyl)ether		10.0	U	10.0	
108-60-1	bis(2-Chloroisopropyl)ether		10.0	U	10.0	
117-81-7	bis(2-ethylhexyl)phthalate		(C.00.918	J	10.0	14

115/04 msa

SEN VOLETIL NIRGANICS ANALYSIS DETA SHEET

Lab Name:	GCAL	Sample 2: _5	KSWD52100	8	560.3
Lab Code:	LA024 Case No.:	Contract:			
Matric W				SDG No.:	203121507
Sample wt/v	ol: 1000 Units: mt		20312150	701 Lab Fi	ile ID: 2031224/S
Level: (low/r	ned)	Date Collected	12/11/03	Time:	1352
	decanted: **N)		12/13/03		
GC Columns	: DB-5MS-30M IC: .25 (mm)	Date Analyzed	12/24/03	Time:	1908
Concentrate	d Sample Volume: 1000 (uL)	Dilution Factor	: <u>1</u>	Analy	st: RLW
	Volume: (µL)				
Injection Val	lume: 2 (μL)	Analytical Meth	nod: OLMO	4.2	
	ip: (Y/N) N pH:			`	
CAS NO.	COMPOUND	RESULT		RL	_
	4-Bromophenyl-phenylether	10.0	U	10.0	4
85-68-7	Butylbenzylphthalate	10.0	U	10.0	4
86-74-8	Carbazole	10.0	U	10.0	4
218-01-9	Chrysene	10.0	U	10.0	-
84-74-2	Di-n-butylphthalate	10.0	J	10.0	Jil
117-84-0 53-70-3	Di-n-octylphthalate Dibenz(a,h)anthracene	10.0	- U -	10.0	4
132-64-9	Dibenzoáran	10.0	- ü - l	10.0	┨
84-66-2	Diethylphthalate	10.0	- <u>u</u> - 	10.0	┪
131-11-3	Dimethyl-phthalate	10.0	- u	10.0	┪
105-67-9	2,4-Dimethylphenol	10.0	U	10.0	1
206-44-0	Fluoranthene	10.0	U	10.0	1
86-73-7	Fluorene	10.5	υ	10.0	1
118-74-1	Hexachlorobenzene	10.0	U	10.0	1
87-68-3	Hexachlorobutadiene	10.0	υ	10.0]
77-47-4	Hexachlorocyclopentaciene	10.0	U	10.0]
67-72-1	Hexachloroethane	10.0	U	10.0	3
193-39-5	Indeno(1,2,3-cd)pyrene	10.0	U	10.0	1
78-59-1	Isophorone	10.0	U	10.0	1
91-20-3	Naphthalene	10.0	U	10.0	4
100-01-6	4-Nitroaniine	25.0	U	25.0	4
98-95-3	Nikrobenzene	10.0	<u> </u>	10.0	4
100-02-7	4-Nitrophenol	2 5.0	U	25.0	4
87-86-5 95-01-8	Pentachiorophenol Channellinea	25.0 10.0	U	25.0	1
85-01-8 108-95-2	Phenanthrene Phenol	_ 	U	10.0	4
129-00-0	Pyrene	15.0	- U	10.0	4
621-64-7	N-Nimso-d-n-omovisc- ce	100		10.0	1

215/07

10.0

10.0

86-30-6

95-48-7

N-Nitrosodiphenylar: ne

o-Cresol

10 C

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SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET TENTATIVELY IDENTIFIED COMPOUNDS

Lab Name: GC	AL		Sample ID: SKS	SWD521008	56D·3
Lab Code: LA0	24 2 Case No.:		Contract:		
SAS No.:	SDG No.: 20312	1507	Lab File ID: 203	31224/S4407	
Matrix: Water			Lab Sample ID:	20312150701	
Sample wt/vol:	Units:		Date Collected:	12/11/03 Tim	e: 1352
Level: (low/med)			Date Received:	12/13/03	
% Moisture: not o			Date Extracted:		
GC Column: DE	3-5MS-30M ID: .25	(mm)	Date Analyzed:	12/24/03 Tim	e: 1908
Concentrated Ex		. ('''''') (μL)	Dilution Factor:	1 Ana	llyst: RLW
Injection Volume:	1.0	(µL)	Prep Method:		
GPC Cleanup: (Y		•	Analytical Method	d: SW-846 8270C	
	· · · · · · · · · · · · · · · · · · ·		Instrument ID: N	MSSV2	
Number TICs	Found: 2				
CONCENTR	ATION UNITS:				
CAS NO.	COMPOUND .		RT	EST. CONC.	Q
1 . 626-97-1	Pentanamide		12.348	28.1	1
2. 1120-16-7	Dodecanamide		13.952	46.5	

18 FRM COUNTILE ORGANICS ANALYSIS DATA SHEET

Lab Name:	GCAL	Sample ID: _5	SKSWD5 2DU	P 1008	
Lab Code:	LAC24 Cas No.:	Contract:			
Matric W				SDG No.: 2031	21507
	volt 1000 Units: mt			702 Lab File ID:	
Level: (love)	med)	Date Collected	12/11/03	Time: 1505	
% Moisture:	decanted: (Y'N)	Date Received	12/13/03		
GC Columns	DB-SMS-30M ID: 25 (mm)	Date Analyzed	12/24/03	Time: 1934	
Concentrate	ed Sample Volume: 1000 (µL)	Distion Factor	: 1	Analyst: RL	.w
Sail Aliquet	Volume: (μL)	Prep Method:			
Injection Vol	lume: 2 (µL)	Analytical Met	nod: OLMO	4.2	
		Instrument ID:		· · · · · · · · · · · · · · · · · · ·	
Gr C Cassal	th (116) 14	· stones.	M3012		
CONCENTE	RATION UNITS: ug/L				
CAS NO.	COMPOUND	RESULT	Q	RL	
95-95-4	2,4,5-Trichlorophero	10.0	Ú	10.0	
88-05-2	2,4,6-Trichlorophenoi	10.0	U	10.0	
120-83-2	2,4-Oichlaropheno/	10.0	Ü	10.0	
51-28-5	2,4-Dinitrophenoi	25 0	U	25.0 U J	j.
121-14-2	2,4-Dinitrotoluene	10.0	υ	10.0	
606-20-2	2,6-Dinitrotoluene	10.0	Ü	10.0	
91-58-7	2-Chloronaphthalene	10.0	U	10.0	
95-57-8	2-Chiorophenol	13.0	Ü	10.0	
91-57-6	2-Methylnaphthalene	10.0	U	10.0	
88-74-4	2-Nitroaniline	25.0	U	25.0	
88-75-5	2-Nitrophenol	10.0	U	10.0	
91-94-1	3,3-Dichlorobenzidine	10.0	U	10.0	
99-09-2	3-Nitroaniine	25.0	U	25.0	
534-52-1	2-Methyl-4,6-dinitrophenol	25.0	U	25.0	
59-50-7	4-Chloro-3-methylphenol	10.0	U	10.0	
106-47-8	4-Chloroaniline	•0.0	U	10.0	
7005-72-3	4-Chlorophenyl-phenyletter	10.0	U	10.0	
106-44-5	4-Methylphenol (p-Cresc-)	10.0	U	10.0	
83-32-9	Acenaphthene	10.0	Ü	10.0	
208-96-8	Acenaphthylene	100	U	10.0	
120-12-7	Anthracene	10.0	U	10.0	
56-55-3	Benzo(a)anthracene	*00	U	10.0	
50-32-8	Benzo(a)pyrene	10.0	U	10.0	
205-99-2	Benzo(b)fluoranthene	.0.0	Ū	10.0	
191-24-2	Benzo(g.h.i)perylene	-00	U	10.0	
207-08-9	Benzo(k)fluoranthene	1C 0	Ü	10.0	
111-91-1	Bis(2-Chloroethoxy)metrane	10.0	Ü	10.0	
111-44-4	Bis(2-Chloroethyl)ether	10.0	U	10.0	
108-60-1	bis(2-Chloroisopropy ether	100	Ü	10.0	
	his/2-ethalben/lohthaiate			10.0	

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SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

Lab Name:	GCAL		Sample ID: SKSWD52DUP1008				
Lab Code:	LA024 Case No.:	Contract:					
Matrix: _Wa	ater		SAS No.:	** ** ***	SDG No.:	203121507	
Sample wt/v	ol: 1000 Units: mL		Lab Sample ID	: 203121	50702 Lab File	e ID: 2031224/S	
Level: (low/n	ned)		Date Collected	: 12/11/0	3 Time:	1505	
	decanted: (Y/N)		Date Received	: 12/13/0	3		
GC Column:	DB-5MS-30M ID: .25	(mm)	Date Analyzed:	12/24/03	Time:	1934	
Concentrate	d Sample Volume: 1000	- (μL)	Dilution Factor:	: 1	Analys	st: RLW	
	Volume:	-					
Injection Vol	ume: 2	(µL)	Analytical Meth				
	ıp: (Y/N) N pH:		Instrument ID:			<u></u>	
	RATION UNITS: ug/L		RESULT	0	DI.		
101-55-3	4-Bromophenyl-phenylether		10.0	Q U	<i>RL</i>	1	
85-68-7	Butylbenzylphthalate		10.0	Ü	10.0	-	
86-74-8	Carbazole		10.0		10.0	1	
218-01-9	Chrysene		10.0	U	10.0	1	
84-74-2	Di-n-butylphthalate		10.01.41	j	10.0	u	
117-84-0	Di-n-octylphthalate		10.0	Ü	10.0	100	
53-70-3	Dibenz(a,h)anthracene		10.0	Ü	10.0	1	
132-64-9	Dibenzofuran		10.0	U	10.0	1	
84-66-2	Diethylphthalate		10.0		10.0	1	
131-11-3	Dimethyl-phthalate		10.0	- ŭ	10.0	1	
105-67-9	2,4-Dimethylphenol		10.0	Ü	10.0		
206-44-0	Fluoranthene		10.0	-	10.0		
86-73-7	Fluorene		10.0	-	10.0	}	
118-74-1	Hexachlorobenzene		10.0	Ū	10.0	İ	
87-68-3	Hexachlorobutadiene		10.0	Ū	10.0		
77-47-4	Hexachlorocyclopentadiene		10.0	Ü	10.0		
67-72-1	Hexachloroethane		10.0	Ū	10.0		
193-39-5	Indeno(1,2,3-cd)pyrene		10.0	U	10.0		
78-59-1	Isophorone		10.0	Ú	10.0		
91-20-3	Naphthalene		10.0	Ú	10.0		
100-01-6	4-Nitroaniline		25.0	Ü	25.0		
98-95-3	Nitrobenzene		10.0	U	10.0		
100-02-7	4-Nitrophenol		25.0	U	25.0		
87-86-5	Pentachlorophenol		25.0	Ü	25.0		
85-01-8	Phenanthrene		10.0	U	10.0		
108-95-2	Phenol		10.0	U	10.0		
129-00-0	Pyrene		10.0	U	10.0		
621-64-7	N-Nitroso-di-n-propylamine		10.0	U	10.0		
86-30-6	N-Nitrosodiphenylamine		10.0	U	10.0		
OE 40 7	o Crosel		100		10.0	1	

2/5/-4

SERVICULAT LE CRISANCS (NA CHISICATA SHEET) TENTAT VELHICENT FERI CIMPOUNDS

Lab Name: GCAL	Sample D SKSWD52DUP1008
Lab Code: LA024 2 Case No.:	Ochtradt
SAS No.: SDG No.: 203*2*507	Lat File ID. 21312 24/\$4408
Matrix: Water	Lat Sample (D 203121507C2
Sample wt/vol: Units	Date Collecter 12/11/03 Time: 1505
Level: (low/med)	Date Received: 12/13/03
% Maisture: not dec.	Dare Extracred:
GC Column: D8-5MS-30M (D. 25 (mr	Date Analyzes 12/24/03 Time: 1934
Concentrated Extract Volume: (µt	O Litton Factor: 1 Analyst RLW
injection Volume: 1.0 (μί	Prep Method:
GPC Cleanup: (Y/N) N ::H:	4-ralytical Method: SW-845 8270C
	instrument iD: MSSV2
Number TICs Found: 2	
CONCENTRATION UNITS:	
CAS NO. COMPOUND	RT EST. CONC. Q
1. 626-97-1 Pentanamide	· 2.34 ⁷ 39
2 1120-16-7 Dodecanamide	·3 95· 56.9

1D SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

Lab Name: GCAL	Sample ID: SKSWD521008
Lab Code: LA024 Case No.:	Contract:
Matrix: Water	SAS No.: SDG No.: 203121507
Sample wt/vol: 1000 Units: mL	Lab Sample ID: 20312150701
Level: (low/med)	Date Collected: 12/11/03 Time: 1352
	Date Received: 12/13/03
% Moisture: decanted: (Y/N)	
GC Column: RTX-50-30M ID: .53 (mm)	Date Analyzed: 12/25/03 Time: 0105
Concentrated Extract Volume: (µL)	Dilution Factor: 1 Analyst: DLB
Injection Volume: (µL)	Prep Method:
GPC Cleanup: (Y/N) N pH:	Analytical Method: OLMO 4.2
	Sulfur Cleanup: (Y/N) N Instrument ID: GCS11A
	Lab File ID: 2031224/SV1101
CONCENTRATION UNITS: ug/L	Cab File ID. 2031224/3V (101
CAS NO. COMPOUND	RESULT Q RL
72-54-8 4,4'-DDD	1 0.100 U 0.100
72-55-9 4,4'-DDE	0.100 U 0.100
50-29-3 4.4'-DDT	0.100 U 0.100
309-00-2 Aldrin	0.050 U 0.050
12674-11-2 Aroclor-1016	1.00 U 1.00
11104-28-2 Aroclor-1221	2.00 U 2.00
11141-16-5 Aroclor-1232	1.00 U 1.00
53469-21-9 Aroclor-1242	1.00 U 1.00
12672-29-6 Aroclor-1248	1.00 U 1.00
11097-69-1 Aroclor-1254	1.00 U 1.00
11096-82-5 Aroclor-1260	1.00 U 1.00
60-57-1 Dieldrin	0.100 U 0.100
959-98-8 Endosulfan I	0.050 U 0.050
33213-65-9 Endosulfan II	0.100 U 0.100
1031-07-8 Endosulfan sulfate	0.100 U 0.100
72-20-8 Endrin	0.100 U 0.100
7421-93-4 Endrin aldehyde	0.100 U 0.100
53494-70-5 Endrin ketone	0.100 U 0.100
76-44-8 Heptachlor	0.050 U 0.050
1024-57-3 Heptachlor epoxide	0.050 U 0.050
72-43-5 Methoxychlor	0.500 U 0.500
8001-35-2 Toxaphene	5.00 U 5.00
319-84-6 alpha-BHC	0.050 U 0.050
5103-71-9 alpha-Chlordane	0.050 U 0.050
319-85-7 beta-BHC	0.050 U 0.050
319-86-8 delta-BHC	0.050 U 0.050
58-89-9 gamma-BHC (Lindane)	0.050 U 0.050
5103 74 2 gamma-Chlordane	0.050

SEMPYOLATILE ORGANICS ANALYSIS DATA SHEET

Lab Name: GCAL	Sample ID: SKS:WD520	DUP1068
Lab Code: LA024 Case No.:	Contract:	
Matrix: Water		SDG No.: 203121507
Sample wt/volt 1000 Units: mL	Lat Sample ID: 203121	50702
	Date Collected: 12/11/0	3 Time: 1505
		
% Moisture: decanted (Y/N)	Date Received: <u>12/13/0</u>	3
GC Column: RTX-50-30M ID: .53 (mm)	Date Analyzed: 12/25/0	3 Time: 0134
Concentrated Extract Volume: (µL)	Oliution Factor: 1	Analyst: DLB
Injection Volume: (µL)		
GPC Cleanup: (Y/N) N pH:		10 4.2
		Instrument ID: GCS11A
	· -	
CONCENTRATION UNITS: ug/L	Lab File ID: 2031224/\$\	/1102
CAS NO. COMPOUND	RESULT Q	RL
72-54-8 4,4'-000	0.100 U	0.100
72-55-9 4.4'-DOE	0.100 U	0.100
50-29-3 4.4'-DOT	0.100 U	0.100
309-00-2 Aldrin	0.050 U	0.050
12674-11-2 Aracior-1016	1.30 U	1.00
11104-28-2 Aroctor-1221	2.00 U	2.00
11141-16-5 Aroctor-1232	U 56.1	1.00
53469-21-9 Aractor-1242	1.00 U	1.00
12672-29-6 Aroclor-1248	1.00 U	1.00
11097-69-1 Aroctor-1254	1.30	1.00
11096-82-5 Aractor-1260	1.00 U	1.00
60-57-1 Dieldrin	0.100 U	0.100
959-98-8 Endosulfan I	0.050 U	0.050
33213-65-9 Endosulfan II	0.100 U	0.100
1031-07-8 Endosulfan sulfate	0.100 U	0.100
72-20-8 Endrin	ე.1ეე U	0.100
7421-93-4 Endrin aldehyde	3.100 U	0.100
53494-70-5 Endrin ketone	0.100 U	0.100
76-44-8 Heptachlor	0 050 U	0.050
1024-57-3 Heptachlor epoxide	0 050 U	0.050
72-43-5 Methoxychlor	0.500 U	0.500
8001-35-2 Toxaphene	5.00 U	5.00
319-84-6 alpha-BHC	0 050 U	0.050
5103-71-9 alpha-Chlordane	0 050 U	0.050
319-85-7 beta-8HC	0 050 U	0.050
319-86-8 delta-BHC	0.05 0 U	0.050
58-89-9 gamma-BHC (Lindare)	3,050 U	0.050
5103-74-2 gamma-Chlordane	0.050 U	0.050

U.S. EPA - CLP COVER PAGE - INORGANIC ANALYSES DATA PACKAGE

ab Name:	GCAL			Contract:				
ab Code:	LA024	Case No.:		SAS No.:			SDG No.:	203121507
OW No.:								
		EPA S	Sample No.		Lab Samp	ie ID.		
	SWE	7-3 sksw	D521008		2031215070	1		
		sksw	D52DUP1008		2031215070	2		
		sksw	D521008 (DISSOLV	ED)	2031215070	5		
		sksw	'D52DUP1008 (DISS	OLVED)	2031215070	6		
		Were ICP inte	relement corrections	applied ?	Yes / No	YES		
			kground corrections		Yes / No	YES		
	÷	=	ere raw data generati n of background com		Yes / No	NO		
		-pp						
Comments	S:	- 						
								•
other than	the conditions nitted on the di	detailed above.	oliance with the terms Release of this data authorized by the La	contained in this	hardcopy data	package	and in the o	for completeness for computer readable fied by the following
Signature	: bhe 000 .	Bound	(oix	N	ame: <u>-She</u>	lley B	ourgeoi	Zi
Date::	1-7-04	d mag			itle: Inor	_	Mass	ager_
Jaic.,	01					Jane	- 1340	9
			COV	ER PAGE - IN	1			´ ILMO4.1

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EPA **Sample** no.

CACRIGANIC	 	_	 -	_	

SKSW:0521008		
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				SKSW052100	18 D - 3
Lab Hame:	GCAL		Contract:		
Lab Code:	LA024	Case No :	54S No.:	SDG No.: 203	121507
Matric: (soil	/water)	Water	Lab Sample ID: 2031215	50701	
Levet (low	med)		Date Received: 12/13/03	3	
% Solids:		_			
			_		

Concentration Units (ug/L or mg/kg dry weight): ug/L

CAS No.	Anaryte	Concentration	5	Q	М	1
7443-36-0	Antimony	3.7	J		P	٦
7440-38-2	Arsenic	29	ij		P	٦
7440-39-3	Barium	37.0	3		Р	٦
7440-41-7	8eryllium	01	J.		Ρ	٦
7440-43-9	Cadmium	32	U		P	٦
7440-47-3	Chromium	10	3		P	٦
7440-50-8	Copper	14.8	3		P	٦
7439-89-6	iron	155			Р	٦
7439-92-1	Lesd	15	J		Р	٦
7439-97-6	Mercury	0.1	J	N	AV	٦
7440-02-0	Nickel	0.7	Ü		Р	٦
7782-49-2	Selenium	4.4	U		P	٦
7440-22-4	Silver	0.4	Ü		P	٦
7440-23-0	Thailium	26	Ţ,		Р	٦
7440-66-6	Zinc	32 €		E	Р	٦
57-12-5	Cyanide	30	<u>ບ</u>		AS	7

3/Plat

Color Before:	COLORLESS	Clarity Before	CLEAR	Texture:
Color After.	COLORLESS	Clarity After	CLEAR	Artifacts:
Comments:				

FORM 1 - IN

ILM04.1

1

EPA SAMPLE NO.

INORGANIC	ANALYSIS	DATA	SHEE
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		INORGANIC ANALYS	S DATA SHEET	sks	WD52DUP1	008
Lab Name: GC	CAL	Сог	ntract:	<u> </u>		
Lab Code: LAC	Case No.:	SAS	S No.:	SDGN	lo.: 20312	1507
Matrix: (soil / wat	ter) Water	Lab S	ample ID: _20312	2150702		
Level: (low / med	1)	Date F	Received: 12/13	<i>/</i> 03		
% Solids:	***************************************		***************************************			
Concentration U	nits (ug/L or mg/kg dry weigh	it): ug/L				
CAS No.	Analyte	Concentration	С	Q	M	
7440-36-0	Antimony	3.7	U		Р	
7440-38-2	Arsenic	2.9	U		Р	
7440-39-3	Barium	37.4	В		P	
7440-41-7	Beryllium	0.1	U		Р	
7440-43-9	Cadmium	0.2	U		Р	
7440-47-3	Chromium	1.1	В		Р	
7440-50-8	Copper .	10.3	В		P	
7439-89-6	iron	211			Р	
7439-92-1	Lead	1.5	U		Р	
7439-97-6	Mercury	0.1	U	N	AV	us
7440-02-0	Nickel	0.7	U		Р	
7782-49-2	Selenium	4.4	U		Р	
7440-22-4	Silver	0.4	U		Р	
7440-28-0	Thallium	2.6	U		P	
7440-66-6	Zinc	35.7		E	Р	丁
57-12-5	Cyanide	3.0	U		AS	
·					ć) lo 154
•	COLORLESS	Clarity Before: Clarity After:	CLEAR	 Artifac	***************************************	

FORM I - IN

ILM04.1

US FFEE CLP

EPA SAMPLE NO.

		MORGANIO ANALYSI	TATA SHEST	l.	SKSWD521008 (DISSOLVE	
ab Name: _G	SCAL	Cor**	ast			
ab Code. LA	024 Case No.	\$ \$ \$ \$	Yo.:	SDG No.:	203121507	
Astric (soil/w	ater) Waler	Lab Sar	Tole ID: 203121	50705		
.evet (low / me	ed)	Cate R	eceived 12°13/0	3		
% Solids:						
CAS No.	Units (ug/L or mg/kg dry weig Analite	Concentration	c	0 1	M]	
440-36-0	Antimony	3.7	- L			
440-38-2	Arsenic	29	-			
440393	Barium	40.1	E		P	
440-41-7	Beryllium	0.1	U		P	
440-43-9	Cadmium	0.2	U		Р	
440-47-3	Chromium	1.4	В		P	
440-50-8	Copper	10.4	В		P	
439-89-6	iran	59 C	8		Р	
/439-92-1	Leed	15	L		Р	
439-97-6	Mercury	0 !	ن	N	VA NJ	
440-02-0	Nickel	0.7	U		Р	
782-49-2	Selenium	44	L L		Р	
7440-22-4	Silver	04	L.		Р	
7440-28-0	Thalicm	25	٤		P	

916

270 MSE

Color Before:	COLORLESS	Clarity Before	CLEAR	Texture:	· · · · · · · · · · · · · · · · · · ·
Color After:	COLORLESS	Clarity After	CLEAR	Artifacts:	
Comments:					

7440-66-6

Zinc

ILM04.1

000273

U.S. EFA -

INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO.

Lab Name: GC	CAL	Cont	ract:			
Lab Code: LAC	024 Case No.:	SAS	No.:	SDG	No.: 2031	21507
Matrix: (soil / wa	ter) Water	Lab Sa	mple ID: 203121	50706		
Level: (low / med	1)	Date R	eceived: 12/13/0	3		
% Solids:				······································		
Concentration U	nits (ug/L or mg/kg dry weight) :	ug/L				
CAS No.	Analyte	Concentration	C	Q	М	
7440-36-0	Antimony	3.7	U		P	
7440-38-2	Arsenic	2.9	U		Р	
7440-39-3	Barium	37.4	В		P	j
7440-41-7	Beryllium	0.1	U		P	
7440-43-9	Cadmium	0.2	Ų		P	
7440-47-3	Chromium	0.9	В		Р	
7440-50-8	Copper	7.8	В		Р	
7439-89-6	Iron	46.1	В		Р	
7439-92-1	Lead	1.5	U		Р	_
7439-97-6	Mercury	0.1	U	N	AV	W
7440-02-0	Nickel	0.7	U		Р	
7782-49-2	Selenium	4.4	υ		Р	
7440-22-4	Silver	0.4	J		P	
7440-28-0	Thallium	2.6	U	·	Р	
7440-66-6	Zinc	33.9		E	Р	ゴ

MINGE

Color Before:	COLORLESS	CLEAR	Texture:	
Color After:	COLORLESS	CLEAR	Artifacts:	
Comments:				

FORM I - IN

ILM04.1

CHAIN OF CUSTORY RECORD

7979 GSRI Avenue, Baton Flouge, Louisiana 70820-7402 Phone 225.769,4900 • Fax 225.767.6717	Client Name	Client # Workorder # Due Date	1
Client: Factor Total Address: AD factor Total Contact: Fax: G9 442 230 P.O. Number Project Name/Number SHEAD TOTAL Project Name/Number	Contact: Phone: Fax:	Analytical Requests & Method Custody Seal used [] no in tact [] 765 [] no Temperature °C	
Matrix' Date Time C C Sample Description Sample Description Skill	Preservatives Room tainers	Remarka: 17, (-1) 14, (-	j
Relinguished by: (Signature) Received by Received by Received by	(: (Signature) Date: 12-13-03 1000 (: (Signature) Date: 7:03 7:00 Date: 7:00 7:00 Date: 7:0	Other Note: Fed Ex # 34259530 532/ By submitting these samples, you agree to the terms and conditions contained in our most recent schedule of services.	



ANALYTICAL RESULTS

PERFORMED BY

GULF COAST ANALYTICAL LABORATORIES, INC.

Report Date 12/02/2003

GCAL Report 203111413

ADDENDUM

Deliver To Earth Tech 200 Vine Street Wilder, KY 41076 859-442-2300

• 11

Attn Pat Higgins

Customer Earth Tech

Project Skinner Landfill

CASE NARRATIVE

Client: Earth Tech Report: 203111413

Gulf Coast Analytical Laboratories received and analyzed the sample(s) listed on the sample cross-reference page of this report. Receipt of the sample(s) is documented by the attached chain of custody. This applies only to the sample(s) listed in this report. No sample integrity or quality control exceptions were identified unless noted below.

SEMI-VOLATILES MASS SPECTROMETRY

In the semi-volatile analysis, 4-Nitrophenol was recovered above QC limits in the MS/MSD. 2,4-Dinitrotoluene was slightly above in the QC limit in the MSD.

SEMI-VOLATILES GAS CHROMATOGRAPHY

In the Pesticide analysis of the MS/MSD, the spike recovery for gamma-BHC was below QC limits. This is attributed to matrix interference.

In the analysis of RESC01 (resolution check), Methyoxychlor and Endosulfan Sulfate were not resolved on the confirmation column; however, all compounds were resolved on the initial column.

METALS

1.180

In the ILM04.1-CLP Metals analysis for prep batches 265578 and 265580, the MS recovery was outside the control limits for Selenium. The LCS recovery was within control limits. This indicates the analysis is control and the sample is affected by matrix interference. A post-digestion spike was performed on the QC sample for this batch with a recovery of 0%.

Zinc is flagged with an "*" for samples associated with prep batch 265580 due to the fact that the absolute difference between the original sample result and the duplicated result is greater than the CRDL, and the sample and/or duplicate result is between the CRDL and 5X the CRDL.

In the ILM04.1-CLP Metals, Manganese is flagged as estimated for samples associated with prep batches 265578 and 265580 due to the fact that the percent difference between the original sample result and the serial dilution result is greater than 10. A chemical or physical interference is suspected.

1

EPA SAMPLE NO.

INORGANIC	ANALYSIS	DATA	SHEET

SKSW511008	

Lab Name: PROJ AAH GCAL	Contract:	50
Lab Code: LA024 Case No.:	SAS No.:	SDG No.:
Matrix: (soil / water) Water	Lab Sample ID: 20311141301	
Level: (low / med)	Date Received: 11/14/03	
% Solids:	**************************************	

Concentration Units (ug/L or mg/kg dry weight): ug/L

CAS No.	Analyte	Concentration	С	Q	M	1
7429-90-5	Aluminum	25.8	υ		P	1
7440-36-0	Antimony	3.7	U		Р	1
7440-38-2	Arsenic	3.4	В		P	1
7440-39-3	Barium	41.3	В		P	1
7440-41-7	Beryllium	0.1	U	-	Р	1
7440-43-9	Cadmium	0.2	U		Р	1
7440-70-2	Calcium	86400			P	1
7440-47-3	Chromium	0.8	U		Р	1
7440-48-4	Cobalt	0.4	U		P	1
7440-50-8	Соррег	4.4	В		Р	1
7439-89-6	Iron	69.2	В		Р	1
7439-92-1	Lead	1.5	U		Р	1
7439-95-4	Magnesium	23900			Р	1
7439-96-5	Manganese	5.8	В	Æ	Р	1
7439-97-6	Mercury	0.1	U		AV	1
7440-()2-0	Nickel	0.7	U		Р	1
7440-()9-7	Potassium	3990	В		P	1
7782-4-9-2	Selenium	4.4	Ū	N	Р	16
7440-2:2-4	Silver	0.4	Ü	······································	P	1
7440-2:3-5	Sodium	33000		· · · · · · · · · · · · · · · · · · ·	P	1
7440-2:8-0	Thallium	2.6	U		P	1
7440-6i2-2	Vanadium	0.8	U		Р	1
7440-€6-6	Zinc	1.3	В		Р	7
57-12-5	Cyanide	3.0	U		AS	1]

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Color Before:	COLORLESS	Clarity Before:	CLEAR	Texture:	# 4% A MANUAL VIEW - 100-1000-1000-1000-1000-1000-1000-10
Color After:	COLORLESS	Clarity After:	CLEAR	Artifacts:	
Comments:					

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EPA SAMPLE NO.

INORGANIC ANALYSIS DATA SHEET

SKSW511008	MS

					5~0	
Lab Name: PF	ROJ AAH GCAL	Contra	ct:			
Lab Code: <u>LA</u> C	O24 Case No.:	SAS N	0.:	SDG	No.:	
Matrix: (soil / wa	ater) Water	Lab Sam	ple ID: 20311	141302		
Level: (low / me	ed)	Date Red	ceived: 11/14/	03		
% Solids:						
Concentration l	Units (ug/L or mg/kg dry weigi	ht) : ug/L				
CAS No.	Analyte	Concentration	С	Q	M	
7429-90-5	Aluminum	2160		· · · · · · · · · · · · · · · · · · ·	Р	
7440-36-0	Antimony	106			P	
7440-38-2	Arsenic	40.1			Р	
7440-39-3	Barium	2030			Р	
7440-41-7	Beryllium	53.1			Р	
7440-43-9	Cadmium	48.3			Р	
7440-70-2	Calcium	86700			P	
7440-47-3	Chromium	205			P	
7440-48-4	Cobalt	490			Р	
7440-50-8	Copper	253			P	
7439-89-6	Iron	1110			Р	
7439-92-1	Lead	19.0			Р	
7439-95-4	Magnesium	24000			Р	
7439-96-5	Manganese	517		Æ	Р	
7439-97-6	Mercury	5.9			AV	
7440-02-0	Nickel	488			Р	
7440-09-7	Potassium	3960	В		Р	
7782-49-2	Selenium	4.4	U	N	Р	R
7440-22-4	Silver	51.5			Р	
7440-23-5	Sodium	32600			Р	
7440-23-0	Thallium	45.4			Р	
7440-6.2-2	Vanadium	513			Р	_
7440-66-6	Zinc	497			P	I
57-12-5	Cyanide	96.7			AS	

Color Before:	COLORLESS	Clarity Before:	CLEAR	Texture:	
Color After:	COLORLESS	Clarity After:	CLEAR	Artifacts:	

Comments:

1.100

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INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO.

SKSW511008	DUP
₹ 2)	

Lab Name: P	ROJ AAH GCAL	Cor	ntract:			
Lab Code: LA	NO24 Case No.:	SAS	S No.:	SDG	No.:	
Matrix: (soil / w			ample ID: 20311	141304		
Level: (low / m	ed)		Received: 11/14/			
% Solids:						
Concentration	Units (ug/L or mg/kg dry weig	ht) ; ug/L				
CAS No.	Analyte	Concentration	С	Q	M	
7429-90-5	Aluminum	25.8	U	···	P	
7440-36-0	Antimony	3.7	U		P	
7440-38-2	Arsenic	2,9	U		P	
7440-39-3	Barium	40.8	В		P	
7440~11-7	Beryllium	0.1	 		P	
7440-43-9	Cadmium	0.2	U U			
7440-70-2	Calcium	92700	 		P	}
7440-47-3	Chromium	0.8	U	· 	P	
7440-48-4	Cobalt	0.4	U U		P	
7440-50-8	Copper	3.7	В		P .	
7439-89-6	Iron	64.1	В		P	
7439-92-1	Lead	1.5	 		P	
7439-95-4	Magnesium	24900			P	
7439-96-5	Manganese	5.7	В	<u> </u>	P	ĺ
7439-97-6	Mercury	0.1	 		ĀV	
7440-02-0	Nickel	0.7	U	·	P	-
7440-09-7	Potassium	4100	В		P	
7782-49-2	Selenium	4.4	U	N	, P	R
7440-22-4	Silver	0.4	1 0		- P	,
7440-23-5	Sodium	34100	 	· - · · · · · · · · · · · · · · · · · ·	P	
7440-28-0	Thallium	2.6	 		'	
7440-62-2	Vanadium	0.8	 		' P	
7440-66-6	Zinc	0.6	T U		P '	UJ
57-12-5	Cyanide	3.0	T U		AS	M 2
					Ş	016105 più
Colo: Before:	COLORLESS	Clarity Before:	CLEAR	Text		
Colo: After:	COLORLESS	Clarity After:	CLEAR	Artifa	auls.	
Comments:						

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EPA SAMPLE NO.

INORGANIC	ANALYSIS	DATA	SHEET
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SKSWFB1008	
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Lab Name: P	ROJ AAH GCAL	Contra	act:			
Lab Code: LA	024 Case No.:	SAS	No.:	SDG I	No.:	
Matrix (soil/w	ater) <u>Water</u>	. Lab San	nple ID: 203111	41305		
Level: (low / me	ed)	Date Re	eceived: 11/14/0	13		
% Solids:		Date No	1171476			
Concentration	Units (ug/L or mg/kg dry we	ight) : ug/L				
CAS No.	Analyte	Concentration	С	Q	М]
7429-90-5	Aluminum	25.8	U		Р	į
7440-3/3-0	Antimony	3.7	U		P]
7440-3:3-2	Arsenic	2.9	U		Р	}
7440-39-3	Barium	0.3	υ		Р]
7440-41-7	Beryllium	0.1	U		Р	}
7440-43-9	Cadmium	0.2	U		Р]
7440-7()-2	Calcium	14.1	В		Р]
7440-47-3	Chromium	0.8	U		P]
7440-48-4	Cobalt	0.4	U		Р]
7440-50-8	Copper	1.2	υ		Р]
7439-89-6	Iron	14.1	U		Р]
7439-92-1	Lead	1.5	U		Р]
7439-95-4	Magnesium	36.7	U		Р	}
7439-96-5	Manganese	0.2	U	5	Ρ	
7439-97-6	Mercury	0.1	U		AV	}
7440-02-0	Nickel	0.7	υ		P	
7440-09-7	Potassium	42.1	Ü		Р	
7782-49-2	Selenium	4.4	U	N	Р] R
7440-22-4	Silver	0.4	Ü		Р]
7440-23-5	Sodium	45.4	U		Р	}
7440-28-0	Thallium	2.6	Ü		Р]
7440-62-2	Vanadium	2.9	В		Р	
7440-66-6	Zinc	0.6	Ü		Р	Jus
57-12-5	Cyanide	3.0	U		AS	7

FORM I - IN

Clarity After:

Color After:

Comments:

COLORLESS

CLEAR

ILM04.1

Artifacts:

EPA SAMPLE NO.

INORGANIC ANALYSIS DATA SHEET

SKSW521008	
51	

				J ONO	5	
Lab Name: P	ROJ AAH GCAL	Contra	ict:			<u> </u>
Lab Code: LA024 Case No.:		SAS N	o.:	SDG N	No.:	
Matrix: (soil / w	vater) Water	Lab Sam	nple ID: 203111	141306		
Level: (low / m	ed)		ceived: 11/14/0			
% Solids:		Duto No	- Thirtie			
	Units (ug/L or mg/kg dry wel	ight): ug/L				
CAS No.	Analyte	Concentration	С	Q	М	
7429-90-5	Aluminum	25.8	U		P	
7440-36-0	Antimony	3.7	υ		Р	
7440-38-2	Arsenic	2.9	U		Р	
7440-39-3	Barium	42.6	В		Р	
7440-41-7	Beryllium	0.1	Ü		P	
7440-43-9	Cadmium	0.2	U		P	
7440-70-2	Calcium	86700			P	
7440-47-3	Chromium	0.8	U		P	
7440-48-4	Cobalt	0.4	U		Р	
7440-50-8	Copper	3.2	В		P	
7439-89-6	Iron	83.8	В		Р	
7439-92-1	Lead	1.5	U		Р	
7439-95-4	Magnesium	23900			Р	
7439-96-5	Manganese	6.5	В	Z	Р	
7439-97-6	Mercury	0.1	U		AV	
7440-(2-0	Nickel	0.7	U	 	P	
7440-0 9-7	Potassium	3820	В		P	
7782-49-2	Selenium	4.4	U	N	P	R
7440-22-4	Silver	0.4	U		P	•
7440-23-5	Sodium	32800			P	
7440-28-0	Thallium	2.6	U		P	
7440-E2-2	Vanadium	0.8	- U		P	
7440-66-6	Zinc	0.6	U		Р	uJ
57-12-5	Cyanide	3.0	U		AS	•
					i	mru mru
Color Before:	COLORLESS	-	LEAR	Textu		
Color After:	COLORLESS	Clarity After: C	LEAR	Artifa	icts:	
Comments:						

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EPA SAMPLE NO.

INORGANIC ANALYSIS DATA SHEET

SKSW531008	
52	

						\$2		
Lab Name: P	ROJ AAH GC	AL.		_ Contract:				
Lab Code: LA	1024	Case No.:		SAS No.:		SDG No.:		
Matrix: (soil / w	vater) <u>Wate</u>			Lab Sample ID:	20311141307			
Level: (low / m	ed)			Date Received:	11/14/03			
% Solids:								
Concentration	Units (ug/L or	mg/kg dry weight	t): ug/L					
CAS No.	Α	nalvte	Concentr	ation C		Q I	М	

CAS No.	Analyte	Concentration	C	Q	М	
7429-90-5	Aluminum	25.8	U		P	1
7440-36-0	Antimony	3.7	U		P	1
7440-38-2	Arsenic	2.9	Ú		Р	1
7440-39-3	Barium	41.2	В		Р	1
7440-41-7	Beryllium	0.1	U		Р	1
7440-43-9	Cadmium	0.2	U		Р	1
7440-70-2	Calcium	84800			P	1
7440-47-3	Chromium	0.8	U		P	1
7440-48-4	Cobalt	0.4	Ü		P	
7440-50-8	Copper	3.3	В		Р	
7439-89-6	Iron	79.6	В		Р	1
7439-92-1	Lead	1.5	U		P	1
7439-95-4	Magnesium	23300			P	1
7439-96-5	Manganese	6.8	8	, E	Р	1
7439-97-6	Mercury	0.1	U		ÄV	1
7440-02-0	Nickel	0.7	U		P	1
7440-09-7	Potassium	3710	В		P	1
7782-49-2	Selenium	4.4	U	N	P	R
7440-22-4	Silver	0.4	Ü		Р	1
7440-23-5	Sodium	32800			Р	1
7440-23-0	Thallium	2.6	U		P	1
7440-62-2	Vanadium	0.8	U		P	1
7440-63-6	Zinc	0.6	Ú		P	LU
57-12-5	Cyanide	3.0	Ü		AS	1

Color Before:	COLORLESS	Clarity Before:	CLEAR	Texture:	Allen 184 185 185 185 185 185 185 185 185 185 185
Color After:	COLORLESS	Clarity After:	CLEAR	Artifacts:	
Comments:					

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EPA SAMPLE NO.

INORGANIC	ANALYSIS	DATA	SHEET
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SKSW511008 (DISS)

					50	,
Lab Name: PI	ROJ AAH GCAL	Cor	ntract:			
Lab Code: LA024 Case No.:		SAS	S No.:	SDG N	lo.:	
Matrix: (soil / water) Water		Lab S	ample ID: 2031114	41308		
Level: (low / me	ed)		Received: 11/14/0			
% Solids:		54.0	1111470	<u> </u>		
	Units (ug/L or mg/kg dry weigh	t); ug/L				
CAS No.	Analyte	Concentration	С	Q	М	
7429-90-5	Aluminum	25.8	U		† P	
7440-36-0	Antimony	3.7	U		 	
7440-38-2	Arsenic	2.9	U		P	
7440-39-3	Barium	40.0	В		1 p	
7440-41-7	Beryllium	0.1	 		P	
7440-43-9	Cadmium	0.2	U		P	
7440-70-2	Calcium	84100	 		P	
7440-17-3	Chromium	0.8	1 0 1		P	
7440-18-4	Cobalt	0.5	В		P	
7440-50-8	Copper	4.4	В		P	
7439-39-6	Iron	14.1	U		Р	
7439-92-1	Lead	1.5	U		Р	
7439-95-4	Magnesium	23400	 		Р	
7439-96-5	Manganese	3.8	В	7	Р	
7439-97-6	Mercury	0.1	U		AV	
7440-02-0	Nickel	0.7	U		Р	
7440-09-7	Potassium	3840	В		Р	
7782-49-2	Selenium	4.4	U	N	Р	R
7440-22-4	Silver	0.4	U		P	
7440-23-5	Sodium	32100			Р	
7440-28-0	Thallium	2.6	U		P	
7440-62-2	Vanadium	0.8	U		Р	_
7440-66-6	Zinc	0.6	U		Р	UJ
						jobolos Ms
Color Before:	COLORLESS	Clarity Before:	CLEAR		, ,,	
Comments:						

000417 RESUBMITTEL

EPA SAMPLE NO. INORGANIC ANALYSIS DATA SHEET

SKSW511008 MS (DISS	3)
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		20
Lab Name: PROJ AAH GCAL	Contract:	
Lab Code: LA024 Case No.:	SAS No.:	SDG No.:
Matrix: (soil / water) Water	Lab Sample ID: 20311141309	
Level: (low / med)	Date Received: 11/14/03	
% Solids:		

ug/L Concentration Units (ug/L or mg/kg dry weight):

CAS No.	Analyte	Concentration	С	Q	M	7
7429-90-5	Aluminum	2080		- 	P	1
7440-35-0	Antimony	112		· · · · · · · · · · · · · · · · ·	P	1
7440-38-2	Arsenic	41.9			Р	1
7440-39-3	Barium	2060			Р	1
7440-41-7	Beryllium	53.9			P	1
7440-43-9	Cadmium	47.9			P	7
7440-70-2	Calcium	85800			P	1
7440-47-3	Chromium	207			P	1
7440-43-4	Cobalt	494			Р	1
7440-5)-8	Copper	265			Р	1
7439-89-6	Iron	1050			P	7
7439-92-1	Lead	19.7			P	1
7439-9 5-4	Magnesium	23400			P	1
7439-96-5	Manganese	520		JE'	Р	1
7439-97-6	Mercury	5.8		·	AV	1
7440-0:2-0	Nickel	492			P	1
7440-09-7	Potassium	3860	В		Р	7
7782-49-2	Selenium	4.4	υ	N	Р	7(
7440-22-4	Silver	52.8			P	1
7440-23-5	Sodium	32200			Р	1
7440-28-0	Thallium	42.7			Р	7
7440-62:-2	Vanadium	521		·	Р	1
7440-66-6	Zinc	508			P	7

Color Before:	COLORLESS	Clarity Before:	CLEAR	Texture:	
Color After:	COLORLESS	Clarity After:	CLEAR	Artifacts:	
Comments:					

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INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO.

SKSW51	1008	DUP	(DISS)
			,

Lab Name:	PROJ AA	H GCAL	Contract:			
Lab Code:	LA024	Case No.:	SAS No.:	······································	SDG No.:	
Matrix (soil	/water)	Water	Lab Sample ID:	20311141310		
Level: (low	/ med)		Date Received:	11/14/03		
% Solids:						
Concentrat	ion Units (u	g/L or mg/kg dry weight) :	ug/L			

CAS No.	Analyte	Concentration	С	Q	M	
7429-90-5	Aluminum	25.8	Ü	-	Р	
7440-36-0	Antimony	3.7	U		Р	l
7440-38-2	Arsenic	2.9	U	·-	Р	
7440-39-3	Barium	42.1	В		Р	
7440-41-7	Beryllium	0.1	U	• • •	Р	
7440-43-9	Cadmium	0.2	U		Р	
7440-70-2	Calcium	88000			Р	
7440-47-3	Chromium	0.8	U		Р	ĺ
7440-48-4	Cobalt	0.5	В		Р	İ
7440-50-8	Copper	4.2	В		Р	
7439-89-6	Iron	14.1	U		Р	l
7439-92-1	Lead	1.5	U		Р	İ
7439-95-4	Magnesium	24100			Р	i
7439-96-5	Manganese	4.1	В	Z	Р	l
7439-97-6	Mercury	0.1	Ú		AV	1
7440-02-0	Nickel	0.9	В		Р	1
7440-09-7	Potassium	4050	В		Р	1
7782-49-2	Selenium	4.4	U	N	Р	R
7440-22-4	Silver	0.4	U		Р	`
7440-23-5	Sodium	33400			Р	
7440-28-0	Thallium	2.6	U		Р	
7440-62-2	Vanadium	0.8	U		Р	
7440-66-6	Zinc	46.1			Р	۲,

10/6/05 M300

Color Before:	COLORLESS	Clarity Before:	CLEAR	Texture:	
Color After:	COLORLESS	Clarity After:	CLEAR	Artifacts:	
Comments:					

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INORGANIC ANALYSIS DATA SHEET

EΡΔ	SAMPLE NO.
FL \	SAME LE NO.

SKSWFB1008	(DISS)
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Lab Name: PROJ AAH GCAL	Contract:	
Lab Ccde: LA024 Case No.:	SAS No.:	SDG No.:
Matrix: (soil / water) Water	Lab Sample ID: 20311141311	
Level: (low / med)	Date Received: 11/14/03	
% Solids:		

Concentration Units (ug/L or mg/kg dry weight): ug/L

CAS No.	Analyte	Concentration	С	Q	М	7
7429-90-5	Aluminum	25.8	U		Р	1
7440-36-0	Antimony	3.7	U		P	1
440-38-2	Arsenic	2.9	U		P	1
7440-39-3	Barium	0.3	В		P	1
440-41-7	Beryllium	0.1	U		Р	1
440-43-9	Cadmium	0.2	U		P	1
7440-70-2	Calcium	58.4	В		Р	1
7440-47-3	Chromium	0.8	U		Р	1
7440-48-4	Cobalt	0.4	U		Р	7
7440-50-8	Copper	1.6	В		P	1
439-89-6	Iron	14.1	U		Р	1
7439-92-1	Lead	1.5	U		Р	1
7439-95-4	Magnesium	36.7	U		P	1
7439-96-5	Manganese	0.2	U	5	Р	1
7439-97-6	Mercury	0.1	U		AV	1
7440-()2-0	Nickel	0.7	U		P	1
440-()9-7	Potassium	42.1	U		Р	1
782-49-2	Selenium	4.4	U	N	Р	1
7440-22-4	Silver	0.4	Ü		P	1
440-23-5	Sodium	45.4	U		Р	1
440-;28-0	Thallium	2.6	Ü		P	1
440-132-2	Vanadium	2.4	В	· · · · · · · · · · · · · · · · · · · 	P	1
7440-66-6	Zinc	0.6	U		P	1~

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Color Before:	COLORLESS	Clarity Before:	CLEAR	Texture:	
Color After:	COLORLESS	Clarity After:	CLEAR	Artifacts:	
Comments:					

INORGANIC ANALYSIS DATA SHEET

EPA	SAMPLE	NO.
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SKSW821008 (DISS)

Lab Name: PROJ AAH GCAL	Contract:	
Lab Ccde: LA024 Case No.:	SAS No.:	SDG No.:
Matrix: (soil / water) Water	Lab Sample ID: 20311141312	
Level: (low / med)	Date Received: 11/14/03	
% Solids:		

Concentration Units (ug/L or mg/kg dry weight): ug/L

CAS No.	Analyte	Concentration	С	Q	М
7429-90-5	Aluminum	25.8	U		P
7440-36-0	Antimony	3.7	U		Р
7440-38-2	Arsenic	3.2	В		Р
7440-39-3	Barium	42.2	В		Р
7440-4.1-7	Beryllium	0.1	U		Р
7440-43-9	Cadmium	0.2	U		Р
7440-70-2	Calcium	88800			Р
7440-47-3	Chromium	0.8	U		Р
7440-48-4	Cobalt	0.4	U		Р
7440-/50-8	Copper	5.1	В		Р
7439-39-6	Iron	14.1	U		Р
7439-92-1	Lead	1.5	U		Р
7439-35-4	Magnesium	24700			Р
7 439- 3 6-5	Manganese	4.6	В	Je .	Р
7439-37-6	Mercury	0.1	U	<u> </u>	AV
7440-32-0	Nickel	0.7	U		Р
7440-39-7	Potassium	3910	В		Р
7782-49-2	Selenium	4.4	U	N	Р
7440-22-4	Silver	0.4	U		Р
7440-23-5	Sodium	34000			P
7440-28-0	Thallium	2.6	U		Р
7440-62-2	Vanadium	0.8	U		P
7440-66-6	Zinc	0.6	U	7	P

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Color Before:	COLORLESS	Clarity Before:	CLEAR	Texture:	
Color After:	COLORLESS	Clarity After:	CLEAR	Artifacts:	
Comments:					

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EPA SAMPLE NO.

INORGANIC	ANALYSIS	DATA	SHEET
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SKSW\$31008 (DISS)	
57	

Lab Name: PROJ AA Lab Ccde: LA024 Matrix: (soil / water) Level. (low / med) % Solids: Concentration Units (u	Case No.:	Lab Sa	ract:	313	io.:	
Matrix: (soil / water) Level. (low / med) % Solids:	Water	Lab Sa	mple ID: _20311141	313	lo.:	
Level. (low / med)						
% Solids:						
u						
Concentration Units (u			,			
	g/L or mg/kg dry weight) :	ug/L				
CAS No.	Analyte	Concentration	С	Q	M	
7429-90-5 Alum	inum	25.8	U		Р	
7440-35-0 Antin	nony	3.7	U		Р	
7440-38-2 Arsei	nic	2.9	U		P	
7440-39-3 Bariu	m	40.7	В		P	
7440-41-7 Beryl	lium	0.1	U	-	Р	
7440-43-9 Cadn	nium	0.2	U		Р	
7440-70-2 Calci	um	86000		•	Р	
7440-47-3 Chro	mium	0.8	U		Р	
7440-48-4 Coba	lt	0.4	U		Р	
7440-50-8 Copp	er	3.7	В		Р	
7439-89-6 Iron		14.1	U		Р	
7439-92-1 Lead		1.5	U		Р	
7439-95-4 Magr	nesium	23500			Р	
7439-96-5 Mang	janese	5.0	В	¥	Р	
7439-97-6 Merc	ury	0.1	U		AV	
7440-02-0 Nicke	el	0.7	υ		Р	
7440-09-7 Pota:	ssium	3720	В		Р	
7782-49-2 Selei	nium	4.4	U	N	Р	R
7440-22-4 Silve	r	0.4	U	· · ·	Р	• •
7440-23-5 Sodii	ım	32900			Р	
7440-28-0 Thall	ium	2.6	U		Р	
7440-62-2 Vana	dium	0.8	U		Р	
7440-66-6 Zinc		1.5	В		Р	T

Color Before:	COLORLESS	Clarity Before:	CLEAR	Texture:	-
Color After:	COLORLESS	Clarity After:	CLEAR	Artifacts:	***************************************
Comments:					

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ILM04.1

Lab Name:	GCAL		Contract:	
Lab Code:	LA024	Case No.:	SAS No.:	SDG No.: 203111413
Calibration :	Source:	106-41-2 CPI	Instrument ID: ICP5	ICAL ID: 2
			Date Analyzed: 11/21/03	Time: 1101

Analyte	True	Found	CAL %R	Units	Method	Туре
Antimony	120	120	100	ug/L	ILM04.1 - CLP Metals	Р
Arsenic	20.0	17.0	85	ug/L	ILM04.1 - CLP Metals	Р
Beryllium	10.0	9.60	96	ug/L	ILM04.1 - CLP Metals	Р
Cadmiurn	10.0	9.50	95	ug/L	ILM04.1 - CLP Metals	Р
Chromium	20.0	19.1	95	ug/L	ILM04.1 - CLP Metals	Р
Cobalt	100	93.3	93	ug/L	ILM04.1 - CLP Metals	Р
Copper	50.0	47.3	95	ug/L	ILM04.1 - CLP Metals	Р
Lead	6.00	5.10	86	ug/L	ILM04.1 - CLP Metals	Р
Manganese	30.0	29.4	98	ug/L	ILM04.1 - CLP Metals	Р
Nickel	80.0	75.5	94	ug/L	ILM04.1 - CLP Metals	Р
Seleniurn	10.0	8.60	86	ug/L	ILM04.1 - CLP Metals	Р
Silver	20.0	19.7	98	ug/L	ILM04.1 - CLP Metals	Р
Thallium	20.0	20.6	103	ug/L	ILM04.1 - CLP Metals	Р
Vanadium	100	97.4	97	ug/L	ILM04.1 - CLP Metals	Р
Zinc	40.0	27.9	<i>,</i> 70;	ug/L	ILM04.1 - CLP Metals	Р

Lab Name:	GCAL		Contract:	
Lab Code:	LA024	Case No.:	SAS No.:	SDG No.: 203111413
Calibration	Source:	106-41-2 CPI	Instrument ID: ICP5	ICAL ID: 2
			Date Analyzed: 11/21/03	Time: 1419

Analyie	True	Found	CAL %R	Units	Method	Type
Antimony'	120	124	103	ug/L	ILM04.1 - CLP Metals	Р
Arsenic	20.0	18.2	91	ug/L	ILM04.1 - CLP Metals	P
Beryllium	10.0	9.50	95	ug/L	ILM04.1 - CLP Metals	Р
Cadmiuni	10.0	9.20	92	ug/L	ILM04.1 - CLP Metals	Р
Chromium	20,0	19.8	99	ug/L	ILM04.1 - CLP Metals	Р
Cobalt	100	95.0	95	ug/L	ILM04.1 - CLP Metals	Р
Copper	50.0	47.6	95	ug/L	ILM04.1 - CLP Metals	Р
Lead	6.00	5.40	90	ug/L	ILM04.1 - CLP Metals	Р
Manganese	30.0	29.4	98	ug/L	ILM04.1 - CLP Metals	Р
Nickel	80.0	76.4	96	ug/L	ILM04.1 - CLP Metals	Р
Selenium	10.0	11.8	118	ug/L	ILM04.1 - CLP Metals	Р
Silver	20.0	19.6	98	ug/L	ILM04.1 - CLP Metals	Р
Thallium	20.0	16.6	83	ug/L	ILM04.1 - CLP Metals	Р
Vanadiurn	100	102	102	ug/L	ILM04.1 - CLP Metals	Р
Zinc	40.0	27.9	670	ug/L	ILM04.1 - CLP Metals	Р

Lab Name:	GCAL.	وريها ومستعد والمستعدة والمرور والمستعدة والمرور والمراور والمرور والمراور والمرور وال	Contract:			
Lab Code:	LA024	Case No.:	SAS No.:		SDG No.:	203111413
Calibration S	Source:	106-41-2 CPI	Instrument ID:	ICP5	ICAL	ID: 2
			Date Analyzed:	11/21/03	Time:	1721

Analyte	True	Found	CAL %R	Units	Method	Туре
Antimony	120	122	101	ug/L	ILM04.1 - CLP Metals	Р
Arsenic	20.0	17.1	85	ug/L	ILM04.1 - CLP Metals	Р
Beryllium	10.0	9.40	94	ug/L	ILM04.1 - CLP Metals	Р
Cadmiura	10.0	9.10	91	ug/L	ILM04.1 - CLP Metals	Р
Chromium	20.0	19.2	96	ug/L	ILM04.1 - CLP Metals	Р
Cobalt	100	94.0	94	ug/L	ILM04.1 - CLP Metais	Р
Соррег	50.0	46.3	93	ug/L	ILM04.1 - CLP Metals	Р
Lead	6.00	5.50	91	ug/L	ILM04.1 - CLP Metals	Р
Manganese	30.0	28.9	96	ug/L	ILM04.1 - CLP Metals	Р
Nickel	80.0	75.5	94	ug/L	ILM04.1 - CLP Metals	Р
Seleniurn	10.0	11.0	110	ug/L	ILM04.1 - CLP Metals	Р
Silver	20.0	19.5	98	ug/L	ILM04.1 - CLP Metals	P
Thallium	20.0	16.7	83	ug/L	ILM04.1 - CLP Metals	Р
Vanadium	100	99.4	29	ug/L	ILM04.1 - CLP Metals	Р
Zinc	40.0	28.0	707	ug/L	ILM04.1 - CLP Metals	Р

Lab Name:	lame: GCAL		Contract:							
Lab Code:	LA024	Case No.:	SAS No.:	SDG No.: 203111413						
Calibration :	Source:	106-41-2 CPI	Instrument ID: ICP5	ICAL ID: 2						
			Date Analyzed: 11/21/03	Time: 2024						

Analyte	True	Found	CAL %R	Units	Method	Туре
Antimony	120	122	102	ug/L	ILM04.1 - CLP Metals	Р
Arsenic	20.0	18.9	95	ug/L	ILM04.1 - CLP Metals	Р
Beryllium	10.0	9.50	95	ug/L	ILM04.1 - CLP Metals	Р
Cadmium	10.0	9.00	90	ug/L	ILM04.1 - CLP Metals	Р
Chromium	20.0	19.3	97	ug/L	ILM04.1 - CLP Metals	Р
Cobalt	100	94.1	94	ug/L	ILM04.1 - CLP Metals	Р
Copper	50.0	47.2	94	ug/L	ILM04.1 - CLP Metals	Р
Lead	6.00	5.30	89	ug/L	ILM04.1 - CLP Metals	Р
Mangane se	30.0	29.3	98	ug/L	ILM04.1 - CLP Metals	Р
Nickel	80.0	75.5	,94	ug/L	ILM04.1 - CLP Metals	Р
Selenium	10.0	13.9	(39)	ug/L	ILM04.1 - CLP Metals	Р
Silver	20.0	19.5	98	ug/L	ILM04.1 - CLP Metals	Р
Thallium	20.0	20.8	104	ug/L	ILM04.1 - CLP Metals	Р
Vanadium	100	100	100	ug/L	ILM04.1 - CLP Metals	Р
Zinc	40.0	28.3	CIR	ug/L	ILM04.1 - CLP Metals	Р

Lab Name:	GCAL.		Contract:	
Lab Cod∈:	LA024	Case No.:	SAS No.: SDG No.	o.: 203111413
Calibration	Source:	106-41-2 CPI	Instrument ID: ICP5 ICA	L ID: 2
			Date Analyzed: 11/21/03 Tim	ne: 2212

CRDL STANDARD

Analyte	True	Found	CAL %R	Units	Method	Туре
Antimony	120	123	103	ug/L	ILM04.1 - CLP Metals	Р
Arsenic	20.0	17.2	86	ug/L	ILM04.1 - CLP Metals	Р
Beryllium	10.0	9.60	96	ug/L	ILM04.1 - CLP Metals	Р
Cadmium	10.0	9.10	91	ug/L	ILM04.1 - CLP Metals	Р
Chromium	20.0	19.4	97	ug/L	ILM04.1 - CLP Metals	Р
Cobalt	100	94.6	95	ug/L	ILM04.1 - CLP Metals	Р
Copper	50.0	49.1	98	ug/L	ILM04.1 - CLP Metals	Р
Lead	6.00	5.40	90	ug/L	ILM04.1 - CLP Metals	Р
Manganese	30.0	29.6	99	ug/L	ILM04.1 - CLP Metals	Р
Nickel	80.0	75.9	/ 95	ug/L	ILM04.1 - CLP Metals	Р
Selenium	10.0	16.4	(164)	ug/L	ILM04.1 - CLP Metals	Р
Silver	20.0	20.2	101	ug/L	ILM04.1 - CLP Metals	Р
Thallium	20.0	24.0	120	ug/L	ILM04.1 - CLP Metals	Р
Vanadiurn	100	101	101	ug/L	ILM04.1 - CLP Metals	Р
Zinc	40.0	28.1	(FQ)	ug/L	ILM04.1 - CLP Metals	Р

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U.S. EPA - CLP 3 BLANKS

Lab Name:	PROJ AAH GCAL		Contract:	 ·	
Lab Code:	LA024	Case No.:	SAS No.:	SDG No.:	
Preparation	Blank Matrix: (soil /	water) Water			

Preparation Blank Concentration Units: (ug/L / mg/kg) ug/L

19.9800

44 mas*

	Initial								Prepa-	•	
	Calib.		Contir	nuing	Calibrat	tion B	lank (ug/	L)	ration		}
Analyte	Blank								Blank		
7 trialy to	(ug/L)	С	1	С	2	С	3	С		С	M
Aluminura	-38.4	В	25.8	U	25.8	Ū	-44.3	В	-112.880	В	Р
Antimony	3.7	U	6.7	В	3.7	U	6.2	В	3.700	U	Р
Arsenic	2.9	U	2.9	Ū	-3.1	В	2.9	U	-3.246	В	Р
Barium	0.3	U	0.3	U	0.3	U	0.3	Ū	0.300	U	Р
Beryllium	0.2	В	0.2	В	0.1	U	0.1	U	0.100	U	Р
Cadmium	0.2	Ū	0.2	Ū	-0.3	В	0.2	U	-0.252	В	Р
Calcium	7.5	Ü	7.5	U	7.5	U	7.5	U	9.394	В	Р
Chromium	0.8	U	0.8	Ū	0.8	U	0.8	U	0.800	U	Р
Cobalt	0.4	U	0.4	В	0.4	U	0.4	Ū	0.400	U	Р
Copper	4.4	В	2.9	В	1.5	В	2.4	В	1.200	U	Р
Iron	22.7	В	31.0	В	14.1	U	14.1	U	-18.128	В	Р
Lead	1.5	В	1.5	U	1.5	Ū	1.5	U	1.500	U	P
Magnesium	40.3	В	92.0	В	39.8	В	96.1	В	41.668	В	Р
Manganese	0.2	Ū	0.2	U	-0.5	В	0.2	U	0.200	U	Р
Mercury	0.1	U	0.1	U	0.1	U	0.1	U	0.100	U	AV
Nickel	0.8	В	0.7	В	0.7	U	0.7	U	0.700	U	Р
Potassium	42.1	U	42.1	U	42.1	U	42.1	U	42.100	U	Р
Selenium	4.4	U	4.4	υ	4.4	U	4.4	U	4.400	Ü	Р
Silver	0.4	Ū	-1	В	0.4	U	-1	В	-1.097	В	P
Sodium	-126.2	В	-159.2	В	-220.2	В	-200.4	В	-237.12	В	Р
Thallium	3.5	В	2.6	U	2.6	U	2.6	U	2.600	Ū	P
Vanadium	0.8	U	0.8	U	4.1	В	3.0	В	3.448	В	Р
Zinc	-7.7	В	-8.9	В	-11.9	В	-11.1	В	-10.483	В	Р
Cyanide	3.0	Ü	3.0	U	3.0	U			3.000	U	AS

U.S. EPA - CLP 3 BLANKS

Lab Name:	PROJ AAH GCAL		Contract:	 	
Lab Cod∈:	LA024	Case No.:	SAS No.:	 SDG No.:	
Preparation	Blank Matrix: (soil /	water) <u>Water</u>			

Preparation Blank Concentration Units:	(ug/L / mg/kg)	ug/L
Preparation Blank Concentration Units:	(ug/L / mg/kg)	ug/L

11/41/10

									,		
	Initial		ł						Prepa	-	}
	Calib.		Contir	uina	Calibrat	ion B	lank (ug/	L)	ration		ļ
Analyte	Blank		Continuing Calibration Blank (ug/L) ration Blank								}
Analyte		_		_	-	_	•	_	Dialik	_	١
	(ug/L)	С	4	С	5	С	6	C	1	С	M
Aluminum		T	-94.3	В	-70.8	В	-73.0	В	-84.452	В	Р
Antimon'/		Ţ_	3.7	Ū	7.7	В	3.7	U	6.807	В	Р
Arsenic		T	2.9	U	2.9	U	2.9	Ū	2.900	U	Р
Barium		T	0.3	Ū	0.3	U	0.3	U	0.669	В	Р
Beryllium			0.1	U	0.1	U	0.1	U	0.100	U	Р
Cadmium		T	-0.3	В	0.2	U	0.2	U	-0.276	В	Р
Calcium			13.9	В	7.5	Ū	7.5	U	7.500	Ü	Р
Chromium			0.8	U	0.8	U	0.8	U	0.800	U	Р
Cobalt		1	0.4	U	0.4	Ū	0.4	U	0.600	В	Р
Copper		\top	1.2	В	4.9	В	2.4	В	2.432	В	Р
Iron		\top	14.1	U	14.1	Ü	14.1	U	14.100	U	P
Lead		\top	1.5	U	1.5	U	1.5	U	1.500	U	Р
Magnesium			-70.7	В	36.7	U	-61.5	В	36.700	U	Р
Mangarese		Т	0.2	U	0.2	Ū	-0.2	В	-0.207	В	Р
Mercury		\top	0.1	U	0.1	U	0.1	U	0.100	U	ΑV
Nickel			0.7	U	0.7	U	0.7	U	0.700	U	Р
Potassium			42.1	U	42.1	U	42.1	U	42.100	U	Р
Selenium			4.4	U	4.4	U	4.4	U	4.400	U	Р
Silver		T	-0.7	В	0.4	U	-0.4	В	-0.611	В	P
Sodium		\top	-236.5	В	-211.9	В	-249.7	В	-324.28	В	P
Thalliurn		\top	2.6	U	2.6	U	-4.0	В	2.600	U	Р
Vanadium		\top	4.0	В	3.1	В	3.5	В	3.086	В	Р
Zinc			-11.9	В	-10.5	В	-12.1	В	-11.280	В	P
Cyanide		1	\vdash	\top	1			1	1	1	AS

U.S. EPA - CLP 3 BLANKS

Lab Name:	PROJ AAH GCA	L	Contract:	 	
Lab Code:	LA024	Case No.:	SAS No.:	 SDG No.:	
Preparation	Blank Matrix: (soil	l / water)			

Preparation Blank Concentration Units: (ug/L / mg/kg)

Analyte	Initial Calib. Blank		Continuing Calibration Blank (ug/L)					Prepa- ration Blank			
•	(ug/L)	С	7	С	8	С	9	С		С	М
Aluminunı		Τ	-66.0	В	-66.1	В	1			T	P
Antimony		1	9.7	В	11.4	В				\top	Р
Arsenic		T	-3.1	В	2.9	Ū				\neg	Р
Barium			0.3	Ţu T	0.3	U					P
Beryllium		Т	0.1	В	0.1	В				1	P
Cadmium			0.2	U	0.2	U	1				P
Calcium			7.5	U	10.1	В	1				Р
Chromiurn		1	0.8	U	0.8	U					Р
Cobalt		T	0.6	В	0.4	В					Р
Copper		Τ	6.6	В	5.9	В					Р
Iron			14.1	U	14.1	U			<u> </u>		Р
Lead		Τ	1.5	U	1.5	U			<u> </u>		Р
Magnesium		Τ	36.7	U	44.7	В					Р
Manganese			0.2	U	0.2	U					Р
Mercury		1		\top	1						AV
Nickel			0.7	U	0.7	U	ļ				Р
Potassiur1			42.1	υ	42.1	υ					Р
Selenium			4.4	U	4.4	U					Р
Silver			-0.8	В	-0.6	В					P
Sodium		\top	-320.5	В	-331.0	В	1	_		 	Р
Thallium		\top	2.6	U	2.6	U	1			1	P
Vanadium		\top	2.9	В	3.0	В	1				P
Zinc			-9.6	В	-9.4	В					Р
Cyanide		1		1	T			$\neg \vdash$		\top	AS

MS/MSD RECOVERY

Lab Name:	ab Name: PROJ AAH GCAL			4 M				
Lab Code:	LA024	Case No.:	SAS No.:		SDG No.:			
Matrix Spike	- EPA Sample No:	SKSW511008						

SAMPLE NO. : 20311141302

400

1 1000

AMPLE NO. : 2037 COMPOUND	11141302 UNITS	SPIKE ADDED	SAMPLE CONCENTRATION	MS CONCENTRATION	MS % REC	#	QC.	LIMITS
Aluminura	ug/L	2000	25.8	2160	108		75	- 125
Antimony	ug/L	100	3.7	106	106		75	- 125
Arsenic	ug/L	40	3.4	40.1	92		75	- 125
Barium	ug/L	2000	41.3	2030	99		75	- 125
Beryllium	ug/L	50	.1	53.1	106		75	- 125
Cadmium	ug/L	50	.2	48.3	97		75	- 125
Chromium	ug/L	200	.8	205	103		75	- 125
Cobalt	ug/L	500	.4	490	98		75	- 125
Copper	ug/L	250	4.4	253	99		75	- 125
Iron	ug/L	1000	69.2	1110	104		75	- 125
Lead	ug/L	20	1.5	19	95		75	- 125
Manganese	ug/L	500	5.8	517	102		75	- 125
Mercury	ug/L	5	.1	5.9	119		75	- 125
Nickel	ug/L	500	.7	488	98		75	- 125
Selenium	ug/L	10	4.4	4.4	0	N	75	- 125
Silver	ug/L	50	.4	51.5	103		75	- 125
Thallium	ug/L	50	2.6	45.4	91		75	- 125
Vanadiu n	ug/L	500	.8	513	103		75	- 125
Zinc	ug/L	500	1.3	497	99		75	- 125
Cyanide	ug/L	100	3	96.7	97	1	75	- 125

		e used to f de of QC lir	-	covery and RPD values with an asterisk
RPD:	0	out of	0	outside limits

Spike Flecovery: ____1 out of ____20 outside limits

MS/MSD RECOVERY

Lab Name:	PROJ AAH GCAL	- <u> </u>	Contract:	 	
Lab Code:	LA024	Case No.:	SAS No.:	SDG No.:	
Matrix Spike	- EPA Sample No:	SKSW511008 (DISS)			

SAMPLE NO. : 20311141309

44.00

COMPOUND	UNITS	SPIKE ADDED	SAMPLE CONCENTRATION	MS CONCENTRATION	MS % REC	#	QC.	LIMITS
Aluminurı	ug/L	2000	25.8	2080	104		75	- 125
Antimony .	ug/L	100	3.7	112	112		75	- 125
Arsenic	ug/L	40	2.9	41.9	105		75	- 125
Barium	ug/L	2000	40	2060	101		75	- 125
Beryllium	ug/L	50	.1	53.9	108		75	- 125
Cadmium	ug/L	50	.2	47.9	96		75	- 125
Chromium	ug/L	200	.8	207	104		75	- 125
Cobalt	ug/L	500	.5	494	99		75	- 125
Copper	ug/L	250	4.4	265	104		75	- 125
Iron	ug/L	1000	14.1	1050	105		75	- 125
Lead	ug/L	20	1.5	19.7	99		75	- 125
Manganese	ug/L	500	3.8	520	103		75	- 125
Mercury	ug/L	5	.1	5.8	116		75	- 125
Nickel	ug/L	500	.7	492	98		75	- 125
Seleniunı	ug/L	10	4.4	4.4	0	N	75	- 125
Silver	ug/L	50	.4	52.8	106		75	- 125
Thallium	ug/L	50	2.6	42.7	85		75	- 125
Vanadiu n	ug/L	500	.8	521	104		75	- 125
Zinc	ug/L	500	.6	508	102		75	- 125

		e used to f de of QC li	•	overy and RPD values with an asterisk
RPD:	0	out of	0	outside limits

Spike Recovery: 1 out of 19 outside limits

FORM V (PART 1) - IN

000439

EPA	SAMPLE NO.	
	O,	

POST DIGEST SPIK	E SAMPLE RECOVERY	SKSW511008PDS
Lab Name: PROJ AAH GCAL		
Lab Code LA024 Case No.:		
Matrix: (s oil / water) Water	SAS No.:	SDG No.:
% Solids for Sample:	Level: (low / med)	The second secon

Concentration Units (ug/L or mg/kg dry weight): ug/L

	Control	Spiked				1			
Analyte	Limit	Sample		Sample		Spike	% R	Q	М
	%R	Result (SSR)	С	Result (SR)	С	Added (SA)			
Aluminum		69.1	В	25.8	U		0		P
Antimony		122		3.7	Ū	120	102		Р
Arsenic		21.7	1	3.4	В	20	92		P
Barium		41.7	В	.3	U		0		P
Beryllium		9.9		.1	U	10	99		Р
Cadmium		8.3	1	.2	U	10	83		Р
Calcium		87500		7.5	U		0		Р
Chrornium		19	1	.8	U	20	95	1	Р
Cobalt		90.8		.4	U	100	91	1	Р
Copper		53.4		4.4	В	50	98	T	Р
iron		87.2	В	14.1	U		0	\sqcap	Р
Lead		3.9	1	1.5	Ū	6	65		Р
Magnesium		24200	\top	36.7	U		0		Р
Manganese		34.6	1	5.8	В	30	96		Р
Nickel		71	1	.7	Ū	80	89		Р
Potassium		4080	В	42.1	Ū		0		P
Selenium		4.4	TU	4.4	Ū	10	0		Р
Silver		18.1	İ	.4	U	20	91		Р
Sodium		33400	T	45.4	U		0		Р
Thallium		16.1	T	2.6	U	20	81		Р
Vanadium		97.5		.8	U	100	98		Р
Zinc		43.7		1.3	В	40	106	T	P

Comments:

5B

POST DIGEST SPIKE SAMPLE RECOVERY SKSW511008 (DISS)PDS

EPA S	SAMP	LE NC
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Lab Name: PROJ AAH GCAL	
Lab Code LA024 Case No.:	Contract:
Matrix: (soil / water) Water	SAS No.: SDG No.:
% Solids for Sample:	Level: (low / med)

Concentration Units (ug/L or mg/kg dry weight): ug/L

Analyte	Control Limit %R	Spiked Sample Result (SSR)	С	Sample Result (SR)	С	Spike Added (SA)	% R	Q	М
Aluminum		25.8	U	25.8	U		0		Р
Antimony		124		3.7	U	120	103		Р
Arsenic		18.6		2.9	Ű	20	93		Р
Barium		40.6	В	.3	U		0		Р
Beryllium		10		.1	U	10	100		Р
Cadmium		8.6		.2	Ū	10	86		Р
Calcium		84900		7.5	U		0		Р
Chrornium		19.5	1	.8	U	20	98		P
Coba t		93.6	1	.5	В	100	93	1	Р
Copper		53.9		4.4	В	50	99		Р
Iron		14.1	U	14.1	U		0		Р
Lead		5.2		1.5	U	6	87		P
Magnesium		23200		36.7	U		0		Р
Manganese		33	1	3.8	В	30	97		Р
Nickel		72.9	1	.7	U	80	91		Р
Potas sium		3820	В	42.1	Ū		0		Р
Seler ium		4.4	Ū	4.4	Ū	10	0		Р
Silver		19.1	1	.4	U	20	95		Р
Sodium		31800	1	45.4	ΙŪ		0		Р
Thallium		14.4	1	2.6	U	20	72		Р
Vanadium		98.3		.8	Ū	100	98		Р
Zinc		36.4	1	.6	U	40	91	1	P

Comments:

A CHAPP

14 mm

U.S. EPA - CLP 6 DUPLICATES

EPA S	BAME	PLE	NC
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Lab Name: Pf	ROJ AAH GCAL		•	<u> </u>	
Lab Code: LA	024	Case No.:	Contract:		
Matrix: (scil / water) Water		SAS No.:	SDG No.:		
			Level: (low / med)		
% Solids for Sar	mple:		% Solids for Dupli	cate:	

Concentration Units (ug/L or mg/kg dry weight) ug/L

	Control							
Analyte	Limit	Sample (S)	С	Duplicate (D)	С	RPD	Q	М
Aluminum	- 1	25.8	Ū	25.8	Ū	0		Р
Antimony	<u>-</u>	3.7	Ü	3.7	U	0		Р
Arsenic	- I	3.4	В	2.9	υ	200		Р
Barium		41.3	В	40.8	В	1		Р
Berylliur1	-	.1	U	.1	U	0		Р
Cadmium		.2	٦	.2	U	0	\Box	Р
Calcium	0 _ 20	86400		92700		7		Р
Chromit m		.8	U	.8	U	0		Р
Cobalt		.4	U	.4	U	0		Р
Copper		4.4	В	3.7	В	17		Р
Iron		69.2	В	64.1	В	8	1	Р
Lead		1.5	U	1.5	U	0		Р
Magnesium	0 - 5000	23900		24900		1000	1	Р
Manganese	-	5.8	В	5.7	В	2	1	Р
Mercury	-	.1	U	.1	U	0		ΑV
Nickel	-	.7	υ	.7	U	0		Р
Potassium		3990	В	4100	В	3		Р
Seleniu n		4.4	U	4.4	U	0		P
Silver		.4	U	.4	U	0		Р
Sodium	0 . 20	33000		34100	T	3	1	Р
Thallium	-	2.6	U	2.6	U	0		P
Vanadium		.8	U	.8	U	0	1	Р
Zinc	-	1.3	В	.6	U	200		Р
Cyanide		3	U	3	U	0		AS

U.S. EPA - CLP 6 DUPLICATES

EPA SAMPLE NO

SKSW511008	DITE (DISS)
31/344311000	DOI (DIDG)

Lab Name: PROJ AAH GCAL		
Lab Code: LA024 Case No	.: Contract:	
Matrix: (scil / water) Water	SAS No.:	SDG No.:
	Level: (low / med	
% Solids for Sample:	% Solids for	Duplicate:

Concentration Units (ug/L or mg/kg dry weight) ug/L

4 95

	Control		_			-		
Analyte	Limit	Sample (S)	С	Duplicate (D)	С	RPD	Q	М
Aluminum	- 1	25.8	U	25.8	U	0		Р
Antimony	-	3.7	υ	3.7	U	0		Р
Arsenic	-	2.9	Ü	2.9	U	0		Р
Barium	-	40	В	42.1	В	5		Р
Beryllium	-	.1	U	.1	U	0		Р
Cadmiurn	-	.2	J	.2	U	0		Р
Calcium	0 - 20	84100		88000		5		Р
Chromium	-	.8	٦	.8	U	0		P
Cobalt	-	.5	В	.5	В	0		Р
Copper	<u> </u>	4.4	В	4.2	В	5		Р
Iron	- 1	14.1	Ü	14.1	U	0		Р
Lead	<u> </u>	1.5	U	1.5	U	0		Р
Magnesium	0 - 5000	23400		24100		700		Р
Manganese	-	3.8	В	4.1	В	8		Р
Mercury	- 1	.1	U	.1	U	0		AV
Nickel	-	.7	U	.9	В	200		Р
Potassium	-	3840	В	4050	В	5		Р
Selenium		4.4	U	4.4	U	0		Р
Silver	-	.4	U	.4	U	0		Р
Sodium	0 _ 20	32100		33400		4		Р
Thallium	-	2.6	U	2.6	U	0		Р
Vanadiu n	- 1	.8	ح	.8	Ü	0	Ι.	Р
Zinc	0 - 20	.6	J	46.1		45.5	1	Р

1016105

LABORATORY CONTROL SAMPLE

Lab Name:	PROJ AAH C	GCAL	Contract:	Contract:			
Lab Code:	LA024	Case No.:	SAS No.:	SDG No.:			
Solid LCS S	ource:						
Aqueous LC	S Source:	106-40-1 ~310006 HIGH F	PURITY~323				

	Aq	ueous (ug/	L)	Solid (mg/kg)			
Analyte	True	Found	% R	True	Found	С	% R
Aluminum	2000	2080	104				
Antimony	500	542	108				
Arsenic	2000	2120	106				
Barium	2000	2040	102				
Beryllium	50.0	54.0	108				
Cadm um	50.0	50.2	100				
Calcium	10000	10400	104				
Chromium	200	209	104				
Cobal:	500	506	101				
Copper	250	265	106				
Iron	1000	1060	106				
Lead	500	515	103				
Magnesium	10000	10600	106				
Manganese	500	521	104				
Nicke	500	513	103				
Potassium	10000	10300	103				
Selen um	2000	2120	106			-	
Silver	50.0	53.2	106				
Sodiun	10000	10300	103				-
Thallium	2000	2070	104				
Vanadium	500	525	105	1			
Zinc	500	496	99				

LABORATORY CONTROL SAMPLE

Lab Na ne:	PROJ AAH C	SCAL	Contract:	Contract:			
Lab Code:	LA024	Case No.:	SAS No.:	SDG No.:			
Solid LCS S	Source:						
Aguague I C	C Course:	106 40 1 ~310006 HIGH B	II IDITV~323				

	Aq	ueous (ug/	L)	Solid (mg/kg)			
Analy:e	True	Found	% R	True	Found	С	% R
Aluminum	2000	2060	103				
Antimony	500	535	107				
Arsenic	2000	2090	104				
Bariunı	2000	2050	102				
Berylli ım	50.0	54.2	108		-		
Cadmium	50.0	49.7	99				
Calcium	10000	10500	105				
Chromium	200	206	103				
Cobalt	500	498	100				
Copp∈r	250	266	106				
lron	1000	1040	104				
L.ead	500	509	102				
Magnesium	10000	10500	105				
Manganese	500	523	105			-	
Nickel	500	504	101				
Potassium	10000	10600	106				
Selenium	2000	2090	104			-	
Silver	50.0	52.8	106				
Sodium	10000	10400	104]			
Thallium	2000	2060	103				1
Vanac ium	500	528	106				
Zinc	500	502	100				

ICP SERIAL DILUTIONS

	9	LI'A SAMIFEE NO.
	ICP SERIAL DILUTIONS	SKSW511008SD
Lab Name PROJ AAH GCAL		
Lab Code: LA024 Case	e No Contract:	
Matrix: (soil / water) Water	SAS No.:	SDG No.:
•	Level: (low / med)	

Concentration Units:

11/100

ug/L

			-				
Analyte	Initial Sample Result (I)	С	Serial Dilution Result (S)	С	% Difference	Q	М
Aluminum	258	U	129	U			Р
Antimony	37.0	υ	18.5	U			Р
Arsenic	3.4	В	14.5	U	326		Р
Barium	41.3	В	42.6	В	3.1		Р
Beryllium	1.0	Ü	0.5	U			Р
Cadmium	2.0	U	1.0	Ų			Р
Calcium	86400		88300	1	2.2		Ρ
Chromiu n	8.0	U	4.0	Ū			Р
Cobalt	4.0	U	2.0	υ			Р
Соррег	4.4	В	6.0	Ū	36.4		Р
iron	69.2	В	70.5	Ü	1.9		Р
Lead	15.0	U	7.5	U			Р
Magnesium	23900		24500	В	2.5		Р
Manganese	5.8	В	2.4	В	58.6	F	Р
Nickel	7.0	U	3.5	U			Р
Potassium	3990	В	3800	В	4.8		Р
Selenium	44.0	U	22.0	U			Р
Silver	4.0	U	2.0	U			P
Sodium	33000		30700	T-	7		Р
Thallium	26.0	U	13.0	U			P
Vanadiurn	8.0	U	11.9	В			Р
Zinc	1.3	В	3.0	Ū	131		Р

ICP SERIAL DILUTIONS

			NC

SKSW511008 (DISS)SD

1 Break	Lab Name:	PROJ AAH GCAL	01(011011000 (5100)05		
- 12-	Lab Code:	LA024	Case No.	Contract:	
	Matrix: (so ((water) Water		SAS No ·	SDG No :

Level: (low / med)

Concentration Units: ug/L

Analyte	Initial Sample Result (I)	С	Serial Dilution Result (S)	С	% Difference	Q	М
Aluminura	258	U	129	Ū			Р
Antimony	37.0	U	18.5	U			Р
Arsenic	29.0	U	14.5	U			Р
Barium	40.0	В	40.0	В	0		Р
Beryllium	1.0	U	0.5	U			Р
Cadmium	2.0	U	1.0	U			Р
Calcium	84100		84200		.1		Р
Chromium	8.0	υ	4.0	Ū			Р
Cobalt	0.5	В	2.0	U	300		Р
Copper	4.4	В	6.0	Ü	36.4		P
Iron	141	U	70.5	U		1	Р
Lead	15.0	U	7.5	Ū		T	P
Magnesium	23400		22900	В	2.1		Р
Manganese	3.8	В	1.0	Ū	73.7	F	Р
Nickel	7.0	U	3.5	U		12	Р
Potassium	3840	В	3470	В	9.6		Р
Seleniurn	44.0	U	22.0	U			Р
Silver	4.0	U	2.0	U		\Box	P
Sodium	32100		29400	1	8.4		P
Thallium	26.0	U	13.0	Ū			Р
Vanadium	8.0	U	9.9	В		 	Р
Zinc	6.0	Ū	3.0	U			Р



10

INSTRUMENT DETECTION LIMITS (QUARTERLY)

14 1020

Lab Name:	PROJ AAH GCAL			
Lab Code:	LA024	Case No.:	SAS No.:	SDG No.:
Instrument I	D: ICP5		Study Date: 04/30/03	

	Wavelength		CRDL	IDL	
Analyte	(nm)	Background	(ug/L)	(ug/L)	М
Alum num	308.210		200	25.8	Р
Antimony	206.830		60	3.7	Р
Arsenic	193.700		10	2.9	Р
Barium	233.520		200	.3	P
Beryllium	313.100		5	.1	Р
Cadmium	214.430		5	.2	Р
Calcium	315.880		5000	7.5	Р
Chromium	267.710		10	.8	Р
Cobalt	228.610		50	.4	P
Copper	324.750		25	1.2	Р
Iron	259.940		100	14.1	Р
Lead	220.350		3	1.5	Р
Magnesium	279.080		5000	36.7	P
Mançıanese	257.610		15	.2	P
Nickel	231.600		40	.7	P
Potassium	766.480		5000	42.1	P
Selenium	196.030		5	4.4	P
Silver	328.060		10	.4	P
Sodium	589.580	- <u> </u>	5000	45.4	Р
Thall um	190.800	†	10	2.6	Р
Vanadium	290.880		50	.8	P
Zinc	213.860	 	20	.6	Р

Ü.S. EPA - CLP 14 ANALYSIS RUN LOG

Lab Name: PROJ AAH GCAL	Contract:
Lab Code: LA024 Case No.:	SAS No.: SDG No.:
Instrument ID Number: ICP5	Method Type: P
Start Date: 11/21/03	End Date: _11/21/03

	Analyte Symbols	

				L_					_					An	alyte	Syr	nbol	<u> </u>									
EPA Sample No.	D/F	Time	% R	ΑI	Sb	As	Ва	Ве	Cd	Са	Cr	Со	Cu	Fe	Pb	Mg	Mn	Hg	Ni	K	Se	Ag	Na	TI	V	Zn	Cn
ICV	1	1041	T ·	Π	Х	X		Х	Х	Х	Х	Х	X	X	Х	Х	Х		Х		Х	Х		Х	Х	Х	Π
ICV2	1	1048		Х			Х		I^-											Х			Х				o
ICB	1	1055		X	Х	Х	Х	Х	X	Х	X	X	X	Х	Х	X	Х		Х	Х	Х	X	Х	Х	X	Х	Γ
CRDL	1	1101			Х	X		Х	Х		X	X	Х		X		Х		Х		Х	Х		Х	Х	Х	
ICSA	1	1108		X	Х	X	Х	Χ	Х	Х	X	Х	X	X	X	X	Х		Х	Х	Х	Х	Х	Х	Х	Х	
ICSAB	1	1114	1	Х	Х	Х	Х	Χ	Х	X	Х	Х	X	Х	Х	Х	Х		Х	Х	Х	Х	Х	Х	Х	X	
ccv	1	1120		X		Х	Х	Х	Х	Х	Х	Х	Х	Х	X	Х	Х		Х	Х	Х	Х	Х	Х	Х	Х	
CCV2	1	1127			X																						
ССВ	1	1134		X	Х	X	Х	Х	X	Х	X	Х	Х	Х	Х	Х	Х		Х	Х	Х	Х	Х	Х	Х	Х	
777777777777777777777777777777777777777	1	1141																									
7777777777777777777777	1	1148																									
277777777777777777777777777777777777777	1	1155																									
777777777777777777777777777777777777777	5	1202																									
777777777777777777777777777777777777777	1	1208																								\Box	\Box
777777777777777777777777777777777777777	1	1215																									
22272777777777777777	1	1222																									
777777777777777777777777777777777777777	1	1236																									
277777777777777777777777777777777777777	1	1243																									
ccv	1	1311		X		Х	Х	Х	Х	Х	X	Х	Х	Х	X	X	Х		Х	Х	Х	Х	Х	Х	Х	Х	\Box
CCV2	1	1318			Х																						
ССВ	1	1325		Х	Х	Х	Х	X	Х	Х	Х	Х	Х	Х	Х	Х	Х		Х	Х	Х	Х	Х	X	Χ	Х	
777777777777777777777777777777777777777	1	1331																									
777777777777777777777777777777777777777	1	1338																									
77,777,777,777,777,777,777	1	1345																		П							
777777777777777777777777777777777777777	1	1352								ŀ																	
777777777777777777777	1	1359																									
7777777777777777777777	1	1406	T																								

U.S. EPA - CLP 14 ANALYSIS RUN LOG

Lab Name:	PROJ AAH GCAL	Contract:
Lab Code:	LA024 Case No.:	SAS No.: SDG No.:
Instrument IE	Number: ICP5	Method Type: P
Start Date:	11/21/03	End Date: 11/21/03

														An	alyte	Syn	nbol	s					_		_		
EPA Sample No.	D/F	Time	% R	Al	Sb	As	Ва	Ве	Çd	Са	Cr	Со	Cu	Fe	Pb	Mg	Mn	Hg	Ni	ĸ	Se	Ag	Na	TI	٧	Zn	Cn
277777777777777777777777777777777777777	1	1413						-																			
CRDL	1	1419			Х	Х		Х	X		Х	Х	X		Х		Х		Х		Х	Х		Х	Х	Х	
ICSA	1	1426		X	Х	Х	X	Χ	X	Х	X	X	Х	X	X	Х	Х		Х	Х	Х	Х	Х	Χ	Х	Х	
ICSAB	1	1432		X	X	Х	X	Χ	Х	Х	Х	X	X	X	X	Х	Х		Х	X	Х	Х	X	Х	X	Х	
CCV	1	1438		Х		Х	X	Х	X	Х	X	Х	X	X	X	X	X		Х	X	Х	Х	Х	X	Χ	Х	
CCV2	1	1445			Х																						
CCB	1	1451		X	Х	Х	Х	Х	X	Х	Х	X	Х	X	X	Х	Х		Х	X	Х	Х	Х	Χ	Х	Х	
777777777777777777777777777777777777777	1	1458																									
7777777777777777777777	1	1505																									
227777777777777777777777777777777777777	1	1511																									
777777777777777777777777777777777777777	1	1518																									
777777777777777777777777777777777777777	1	1525																									
777777777777777777777777777777777777777	1	1532																									
777777777777777777777777777777777777777	1	1538																									
777777777777777777777777777777777777777	1	1545																									
777777777777777777777777	1	1552																									
727777777777777777777	1	1559																									
CCV	1	1605		Х		Х	Х	Х	Х	X	Х	Х	Х	Х	Х	X	Х		X	Х	Х	X	X	Х	Х	Х	
CCV2	1	1612			Χ																						
ССВ	1	1619		X	Х	Х	X	X	Х	Х	Х	X	Х	Х	X	Х	Х		Х	Х	X	X	Х	X	X	Х	
777777777777777777777777777777777777777	5	1626																									
777777777777777777777777777777777777777	1	1632																									
777777777777777777777777777777777777777	1	1639																									
277777277777777777777777777777777777777	1	1646		П			\dashv											\neg									
777777777777777777777777777777777777777	1	1653																							\sqcap		Γ
772777777777777777777	1	1700																									
7777777777777777777777	1	1707																									

RESUBMITTED

ANALYSIS RUN LOG

Lab Name:	PROJ AAH GCAL	Contract:
Lab Code:	LA024 Case No.:	SAS No.: SDG No.:
Instrument I	ID Number: ICP5	Method Type: P
Start Date:	11/21/03	End Date: 11/21/03

Analyte Symbols

EPA Sample No.	D/F	Time	% R	Ai	Sb	As	Ва	Ве	Cd	Са	Cr	Со	Cu	Fe	Pb	Mg	Mn	Hg	Ni	ĸ	Se	Ag	Na	TI	٧	Zn	Cn
CRDL	1	1721			X	X		Χ	Х		Х	Х	X		Х		Х		X		Х	Х		X	Χ	X	
ICSA	1	1728		Х	Х	Х	Х	Х	X	Х	Х	Х	X	Х	Х	Х	Х		Х	Х	Х	Х	Х	Х	X	X	
ICSAB	1	1734		Х	Х	Х	Х	Х	Х	Х	Х	Х	Х	Х	Х	Х	Х		Х	Х	Χ	Х	Х	Х	Х	X	\Box
CCV	1	1739		Х		Х	Х	X	Х	Х	Х	Х	Х	Х	X	Х	Х		Х	Х	Х	Х	Х	Х	Х	Х	П
CCV2	1	1746			Χ																						\Box
ССВ	1	1753		Х	Χ	Χ	Х	Х	X	X	Х	Х	Х	Х	X	X	Х		Х	Х	Χ	Х	Х	Х	Х	Х	\Box
777777777777777777777777777777777777777	1	1800																									
7.	1	1807																									
711111111111111111111111111111111111111	1	1814																									
717777777777777777777777777777777777777	1	1821																									\Box
777777777777777777777777777777777777777	1	1828																									\Box
777777777777777777777777777777777777777	1	1834																									\Box
777777777777777777777777777777777777777	1	1841																								\Box	
MB130852	1	1848		X	Х	X	X	Х	X	Х	Х	X	Х	Х	X	Х	Х		Х	Х	Х	Х	X	Х	Х	Х	
SKSW511008	1	1855		X	Х	Х	Х	Х	Х	X	Х	Х	Х	X	Х	Х	X		Х	Х	X	Х	Х	X	Х	Х	
SKSW511008 DUP	1	1901		Х	Х	X	Х	Χ	Х	Х	Х	Х	X	X	Х	Х	Х		Х	Х	Х	Х	Х	Х	Х	X	
CCV	1	1908		Х		Х	Х	Х	Х	Х	Х	Х	X	Х	Х	Х	Х		Х	Х	Х	Х	Х	Х	Х	X	\Box
CCV2	1	1915			Х																						\Box
ССВ	1	1922		Х	X	Х	Х	Х	Х	Х	Х	Х	Х	Х	Х	Х	Х		Х	Х	Х	Х	Х	Х	X	X	\Box
SKSWFB1008	1	1929		Х	Х	X	Х	Х	Х	Х	Х	Х	X	Х	Х	Х	Х		X	Х	Х	Х	Х	Х	Х	Х	
SKSW521008	1	1936		Х	Х	Х	X	Χ	Х	Х	Х	Х	Х	Х	Х	Х	Х		X	Х	Χ	Х	Х	Х	Χ	Х	\Box
SKSW531008	1	1943		Х	Х	Х	Х	Х	Х	Х	Х	Х	Х	Х	Х	Х	Х		Х	Х	Х	Х	Х	Х	Х	Х	\Box
SKSW511008SD	5	1950		Х	Х	Х	Х	Х	Х	Х	Х	Х	Х	Х	Х	X	Х		Х	Х	Х	Х	Х	X	Х	X	\Box
SKSW511008PDS	1	1957		Х	Х	Х	Х	X	Х	Х	Х	Х	Х	Х	Х	Х	X		X	Х	Х	Х	Х	Χ	Х	Х	
SKSW511008 MS	1	2004		Х	X	X	Х	Х	X	Х	Х	Х	Х	Х	Х	Х	Х		X	Х	Х	Х	Х	Х	Х	Х	\Box
LCS130853	1	2011		Х	Х	X	Х	X	X	Х	X	Х	X	Х	Х	Х	Х		X	Х	Х	X	X	Х	Х	Х	
CRDL	1	2024			Х	X		Х	Х		Х	Х	Х		Χ		Х		Х		Х	Х		Х	Χ	Х	

ANALYSIS RUN LOG

Lab Name:	PROJ AAI	1 GCAL	Contract:	
Lab Code:	LA024	Case No.:	SAS No.: SDG N	lo.:
Instrument i	D Number:	ICP5	Method Type: P	
Start Date:	11/21/03		End Date: 11/21/03	

Analyte Symbols

EPA Sample No.	D/F	Time	% R	ΑI	Sb	As	Ra	R۵	C4	Ca	Cr	Co	CII	Fο	Dh	Ма	Mn	Hg	Ni	K	Se	Δα	Na	TI	V	7n	Cn
ICSA	1 1		- / 								_		•			_	_	119									
	<u> </u>	2031	<u> </u>	X	X	X	↓	X	X	X	×	X	_	┝	X	X	X	<u> </u>	X	X	Х	X		X	X		└
ICSAB	1	2037		X	X	X	Х	Х	Х	LX	X	X	X	X	X	X	Х		Х	Х	X	X	Х	Х	Х	X	<u>L</u>
CCV	1	2043	Į .	X		Х	X	X	X	X	Х	X	X	X	Х	X	Х		Х	Х	Х	Х	X	X	Х	X	
CCV2	1	2049	Ī		Х								Π	Π		Т											
ССВ	1	2056		X	Х	X	Х	Х	X	Х	Х	Х	X	Х	Х	X	Х		X	Х	Х	X	Х	Х	Х	Х	
MB130856	1	2103		Х	X	Х	Х	Х	Х	X	X	Х	Х	X	X	X	Х		X	X	X	Х	Х	Х	X	Х	
SKSW511008 (DISS)	1	2110		X	X	Х	Х	Х	Х	Х	X	Х	X	X	X	Х	Х		Х	Х	Х	Х	Χ	X	X	Х	
SKSW511008 DUP (DISS)	1	2117	1	X	X	Х	Х	Х	X	X	Х	Х	X	X	Х	X	X		X	X	Х	X	Х	Х	X	X	
SKSW511008 (DISS)SD	5	2124		X	X	X	Х	X	X	Х	X	X	X	Х	Х	X	X		X	X	X	Х	X	Х	X	X	
SKSWFB1008 (DISS)	1	2131	1	X	Х	Х	Х	Х	Х	Х	Х	Х	X	X	Х	X	Х		Х	Х	Х	Х	X	Х	Х	Х	
SKSW521008 (DISS)	1	2137		X	Х	X	X	X	Х	Х	Х	Х	X	X	X	X	X		Х	Х	Х	Х	Х	Х	Х	Х	
SKSW531008 (DISS)	1	2144		Х	Х	X	Х	Х	Х	Х	Х	Х	X	X	Х	Х	Х		Х	X	Х	Х	X	Х	X	Х	
SKSW511008 (DISS)PDS	1	2151		Х	Х	Х	Х	Х	Х	Х	X	Х	X	X	X	X	X		Х	Х	Х	Х	Х	Х	X	X	
SKSW511008 MS (DISS)	1	2158		X	X	Х	Х	Х	Х	Х	X	X	X	X	Х	X	Х		Х	X	X	Х	X	Х	Х	Х	
LCS130857	1	2205	1	Х	Х	Х	Х	Х	Х	Х	Х	X	X	X	X	X	Х		Х	Х	Х	Х	X	Х	Х	X	
CRDL	1	2212	ĺ	Π	Х	Х		X	X		Х	X	X		X		Х		Х		Х	Х		Х	X	Х	
ICSA	1	2218		X	Х	Х	Х	Х	Х	Х	Х	Х	X	X	Х	X	Х		Х	X	Х	Х	X	Х	Х	X	
ICSAB	1	2224		X	Х	Х	Х	X	Х	Х	Х	X	X	Х	Х	X	X		Х	Х	Χ	Х	Х	Х	Х	Х	
CCV	1	2230	l	X		Х	Х	Х	Х	X	Х	Х	Х	X	Х	Х	Х		Х	Х	Х	Х	Х	Х	X	Х	
CCV2	1	2237	†——		Х																						
CCB	1	2244	t	X	Х	Х	Х	Х	Х	Х	X	Х	Х	Х	Х	X	Х		Х	Х	Х	Х	Х	Х	X	Х	

DATA VALIDATION REPORT

FOR

SKINNER LANDFILL SITE

EARTH TECH: PROJECT NUMBER 38335

LABORATORY REPORT NUMBER 203111311

PROJECT MANAGER: Ron Rolker

Date: January 12, 2004

Revised Report Dated: October 6, 2005

Data Validator: Mark Kromis

APPENDIX C LIST OF ACRONYMS

BFB Bromofluorobenzene
CC Continuing Calibration

CCV Continuing Calibration Verification
CCB Continuing Calibration Blanks
CLP Contract Laboratory Program
CRDL Contract Required Detection Limit
DFTPP Decafluorotriphenylphosphine

GC/MS Gas Chromatograph/Mass Spectrometer

IC Initial Calibration
 ICB Initial Calibration Blank
 IDL Instrument Detection Limit
 ICP Inductively Coupled Plasma
 ICS Interference Check Sample
 ICV Initial Calibration Verification

ILM Inorganic Analysis Multi-Media Multi-Concentration

INDAM Individual A Mixture INDBM Individual B Mixture mg/L milligrams per liter

MS/MSD Matrix Spike/Matrix Spike Duplicate
OLC Organic Analysis Low Concentration

OLM Organic Analysis Multi-Media Multi-Concentration

%D Percent Difference

% RSD Percent Relative Standard Deviation

PE Preparation Blanks
QC Quality Control
RF Response Factor

RPD Relative Percent Difference
RRF Relative Response Factor
SDG Sample Delivery Group
SOW Statement of Work
μg/L micrograms per liter

US EPA United States Environmental Protection Agency

VOC Volatile Organic Compounds
VCSR Validated Time of Sample Receipt

DATA VALIDATION SUMMARY – SAMPLE DELIVERY GROUP 203111311 INORGANICS

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Validation of the inorganics data, as prepared by Gulf Coast Analytical Laboratories (GCAL) for the samples collected from the Skinner Landfill site in November 2003, was conducted by Earth Tech using the National Functional Guidelines for Inorganic Data Review, (US EPA, February, 1994), as appropriate. These data were reported by GCAL under Sample Delivery Group (SDG) 203111311.

GCAL #	Sample Description
203111311-01	SKGW07R1008
203111311-02	SKGW06R1008
203111311-03	SKGW591008
203111311-04	SKGW601008
203111311-05	SKGW62A1008
203111311-06	SKGW641008
203111311-08	SKGW07R1008 (DISS)
203111311-09	SKGW06R1008 (DISS)
203111311-10	SKGW591008 (DISS)
203111311-11	SKGW601008 (DISS)
203111311-12	SKGW62A1008 (DISS)
203111311-13	SKGW641008 (DISS)
203111311-14	SKGW581008
203111311-15	SKGW58FD1008
203111311-16	SKGWFB1008
203111311-18	SKGW581008 (DISS)
203111311-19	SKGW58FD1008 (DISS)
203111311-20	SKGWFB1008 (DISS)
203111311-21	SKGW261008
203111311-22	SKGW301008
203111311-23	SKGW611008
203111311-24	SKGW611008 MS
203111311-26	SKGW611008 DUP
203111311-27	SKGW631008
203111311-28	SKGW241008
203111311-30	SKGW261008 (DISS)
203111311-31	SKGW301008 (DISS)
203111311-32	SKGW611008 (DISS)
203111311-33	SKGW611008 MS (DISS)
203111311-34	SKGW611008 DUP (DISS)
203111311-35	SKGW631008 (DISS)
203111311-36	SKGW241008 (DISS)

INTRODUCTION

Analyses of metals were performed according to Contract Laboratory Program (CLP)-Inorganic Analysis Multi-media Multi-concentration ILM04.1 Statement of Work (SOW). Results of the sample analyses are reported by the laboratory as either qualified or unqualified. Unqualified results mean that the reported values maybe used without reservation. Various qualifier codes are used by the laboratory to denote specific information regarding the analytical results.

The data validation process is intended to evaluate the data on a technical basis. The data package also was subjected to an internal laboratory quality review prior to submission to Earth Tech for data validation.

During the validation process, laboratory-qualified and unqualified data are verified against all available supporting documentation. Based on this evaluation, qualifier codes may be added, de eted or modified by the data user. Final results are therefore, either qualified or unqualified. Validator-qualified results are annotated with the following codes in accordance with the Functional Guidelines:

- U The constituent was analyzed for, but was not detected above the level of the associated analytical reporting limit. The associated value is either the sample quantitation limit or the sample detection limit.
- J The analyte was positively identified; the associated numerical value is the approximate concentration of the analyte in the sample.
- UJ The analyte was not detected above the reported sample quantitation limit. However, the reported quantitation limit is approximate and may or may not represent the actual limit of quantitation necessary to accurately and precisely measure the analyte in the sample.
- R The sample results are rejected due to serious deficiencies in the ability to analyze the sample and meet quality control criteria. The presence or absence of the analyte cannot be verified.

Details of the inorganics data validation findings and conclusions are provided in the following sections of this report:

- 1. Holding Times
- 2. Calibration

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A. Initial Calibration (IC)

B. Continuing Calibration (CC)

Blanks

N-1206

- 4. Inductively Coupled Plasma (ICP) Interference Check Sample
- 5. Laboratory Control Sample (LCS)
- 6. Duplicate Analysis
- 7. Spike Sample Analysis
- 8. ICP Serial Dilution
- 9. System Performance
- 10. Documentation
- 11. Overall Assessment

1. HOLDING TIMES

All samples for inorganics analyses were analyzed within the 180-day holding time for preserved aqueous samples. Mercury analyses were conducted within the 28-day holding time for aqueous samples undergoing CLP protocol. Cyanide analyses were conducted within the 14-day holding time. The cooler temperature upon receipt at the laboratory was within the recommended temperature of 4°C +/- 2°C.

2. CALIBRATION

A. Initial Calibration

The percent recoveries for the Initial Calibration Verification (ICV) standard were within Quality Control (QC) limits for all constituents.

B. Continuing Calibration

The percent recoveries for the Continuing Calibration Verification (CCV) standard were within QC limits for all constituents.

3. BLANKS

The Initial Calibration Blank (ICB), Continuing Calibration Blanks (CCB) and Preparation Blanks (PB) were analyzed at the appropriate frequencies. No constituents were detected in the ICB, CCB, and PB blanks above the corresponding Contract Required Detection Limit (CRDL).

4. ICP INTERFERENCE CHECK SAMPLE

Results for the ICP analysis of the Interference Check Sample (ICS) solution AB were within 20% of the true value.

5. LABORATORY CONTROL SAMPLES

Recoveries were within the control limit (80-120%) for all constituents.

6. DUPLICATE ANALYSIS

The RPD between the sample and duplicate were within the acceptance criteria for all target compounds except the Aluminum results associated with the total metals analysis. As per the National Functional Guidelines, if the RPD criteria is not met then qualify the associated results greater than the IDL with "J".

7. SPIKE SAMPLE ANALYSIS

The laboratory used sample SKSW611008 and SKSW611008 (Dissolved) for the matrix spike sample. The MS percent recoveries were within the acceptance criteria (75%-125%) in the total fraction with the exception of Selenium (52%). The MS percent recoveries were within the acceptance criteria (75%-125%) in the dissolved fraction with the exception of Selenium (0%) and Thallium (74%). As per the National Functional Guidelines: if spike recovery results is greater than 30% but less than the lower acceptance limit then qualify the detected results for that analyte with "J" and non-detected results with "UJ". If the percent recovery is less than 10% then qualify detected results for that analyte with "J" and non-detected results with "R".

8. ICP SERIAL DILUTION

As noted in the National Functional Guidelines: If the analyte concentration is at least 50 times above the IDL, its serial dilution analysis must then agree within 10% of the original determination after corrected for dilution. The serial dilution is performed to determine whether any significant chemical or physical interference's exist due to matrix effects. The percent differences were within the acceptance criteria for all target analytes in the total and dissolved fractions.

9. SYSTEM PERFORMANCE

The analytical system appears to have been working well at the time of these analyses, based on the evaluation of the raw data.

10. DOCUMENTATION

The Aluminum results for total metals associated with the Duplicate Analysis were not qualified by GCAL. The data validator manually made the correction on the Form VI and Form I's.

GCAL qualified the total metal results for Aluminum, Nickel and Zinc with an "E" qualifier on the Form 1's and Form IX to indicate that the "Difference ("D) between the original results and its serial dilution result exceeded the control limit. The "Differences were actually within the control limit therefore the data validator crossed out the (E) with a single line and dated and initialed the bottom of the report.

11. OVERALL ASSESSMENT

Barium, Copper, and Iron were detected in the Field Blank (Total) at a concentration of 0.7 B, 1.6 B and 30.8 B ppb respectively. Barium, Copper, and Nickel were detected in the Field Blank (Dissolved) at a concentration of 0.3 B, 1.5 B, and 0.7 B ppb respectively. It should be noted that the laboratory supplied the water used for the Field Blank. The results that are greater than the IDL but less than the CRDL are flagged with a ("B") qualifier by the laboratory.

The percent recoveries for Zinc in the Contract Required Detection Limit (CRDL) standards were 69.8%, 69.7%, 70.1%, and 70.9%. The detected Zinc results were qualified with a "J" and the non-detected Lead results were qualified with "UJ".

There was no Selenium detected in the samples analyzed for total Selenium therefore the dissolved Selenium results that were flagged with and "R" can still be used for informational purposes.

The results are acceptable with the validator-added qualifiers.

DATA VALIDATION SUMMARY – SAMPLE DELIVERY GROUP 203111311 SEMIVOLATILE ORGANICS

Validation of the Gas Chromatograph/Mass Spectrometer (GC/MS) semi-volatile organics data, as prepared by Gulf Coast Analytical Laboratories (GCAL) for the samples collected from the Skinner Landfill site in November 2003, was conducted by Earth Tech using the National Functional Guidelines for Organic Data Review, (US EPA, October, 1999) as appropriate. These data were reported by GCAL under SDG 203111311.

GCAL #	Sample Description
203111311-01	SKGW07R1008
203111311-02	SKGW06R1008
203111311-03	SKGW591008
203111311-04	SKGW601008
203111311-05	SKGW62A1008
203111311-06	SKGW641008
203111311-07	SKGWTB1008
203111311-14	SKGW581008
203111311-15	SKGW58FD1008
203111311-16	SKGWFB1008
203111311-21	SKGW261008
203111311-22	SKGW301008
203111311-23	SKGW611008
203111311-24	SKGW611008 MS
203111311-25	SKGW611008 MSD
203111311-27	SKGW631008
203111311-28	SKGW241008

INTRODUCTION

Analyses were performed according to CLP-Organic Analysis Multi-Media, Multi-Concentration OLM04.2 SOW. Results of the sample analyses are reported by the laboratory as either qualified or unqualified. Unqualified results mean that the reported values may be used without reservation. Various data qualifier codes are used by the laboratory to denote specific information regarding the analytical results. The data validation process is intended to evaluate the data on a technical basis. The data package also was subjected to an internal laboratory quality review prior to submission to Earth Tech for data validation.

During the validation process, laboratory-qualified and unqualified data are verified against all available supporting documentation. Based on this evaluation, qualifier codes may be added, deleted or modified by the data user. Final results are therefore, either qualified or unqualified. Validator-qualified results are annotated with the following codes in accordance with the Functional Guidelines:

- U The constituent was analyzed for, but was not detected above the level of the associated analytical reporting limit. The associated value is either the sample quantitation limit or the sample detection limit.
- J The analyte was positively identified; the associated numerical value is the approximate concentration of the analyte in the sample.
- UJ The analyte was not detected above the reported sample quantitation limit. However, the reported quantitation limit is approximate and may or may not represent the actual limit of quantitation necessary to accurately and precisely measure the analyte in the sample.
- R The sample results are rejected due to serious deficiencies in the ability to analyze the sample and meet quality control criteria. The presence or absence of the analyte cannot be verified.

Details of the semivolatile data validation findings and conclusions are provided in the following sections of this report:

1. Holding Times

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- 2. GC/MS Tuning
- 3. Calibration
 - A. IC
 - B. CC
- 4. Blanks
- 5. System Monitoring Compound Recovery
- 6. MS/MSD
- 7. Internal Standards Performance
- 8. Compound Identification
- 9. Constituent Quantitation and Reported Detection Limits
- 10. System Performance
- 11. Documentation
- 12. Overall Assessment

1. HOLDING TIMES

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All samples were initially extracted within the seven-day technical holding time and the five-day VTSR method holding time. The cooler temperature upon receipt at the laboratory was within the recommended temperature of $4^{\circ}C$ +/- $2^{\circ}C$.

2. GC/MS TUNING

The samples were analyzed on a single GC/MS system, identified as MSSV2. Two decafluorotriphenylphosphine (DFTPP) tunes were run representing the shift in which the standards and samples were analyzed. The DFTPP tunes are acceptable.

3. CALIBRATION

A. Initial Calibration

One IC dated 11/26/03 was analyzed in support of the semivolatile sample analyses. Documentation of the IC was present in the data package, and the Relative Response Factor (RRF), as well as percent % RSD values were accurately reported for all target compounds. The criteria employed for technical data review purposes are different than those used in the method. The laboratory must meet a minimum RRF of 0.01; however, for data review purposes, a RRF criterion of "greater than or equal to 0.05" is applied to all semi-volatile compounds. The RRF's and the average RRF were within the acceptance criteria specified in the method for all reported analytes with the exception of 4-Chloroaniline. As per the National Functional Guidelines, if any initial calibration RRF is less than 0.05, qualify positive results that have acceptable mass spectral identification with "J", using professional judgement, and non-detected analytes as unusable (R).

The %RSD's were within the acceptance criteria specified in the method for all target analytes with the exception of Naphthalene (30.1%), 2,4-Dinitrophenol (34.8%), Diethylphthalate (35.1%), Di-n-butylphthalate (47.4%), Di-n-octylphthalate (37.3%), and Caprolactam (35.8%). The lowest point of the calibration curve was dropped for Diethylphthalate and the %RSD was recalculated. The recalculated %RSD was 8.4%, which is within the acceptance criteria of less than 30%. Diethylphthalate results less than 50 ppb but greater than the IDL were qualified as estimated with a "J" by the data validator. The highest point of the calibration curve was dropped for Naphthalene and Caprolactam and the %RSD were recalculated. The recalculated %RSD was 28.1% and 9.0%, which are within the acceptance criteria of less than 30%. Naphthalene and Caprolactam results greater than 160 ppb were qualified as estimated with a "J" by the data validator. As per the National Functional Guidelines, if the %RSD is greater than the acceptance criteria of 30% then qualify detected results as estimated with "J".

B. Continuing Calibration

Two CCs dated 11/26/03 and 12/1/03 were analyzed in support of the semivolatile sample analyses reported in the data submissions.

The RRF's for the CC dated 11/26/03 were within the acceptance criteria. The percent difference (%D) between the average RRF's and the CC Response Factors for the CC dated 11/26/03 were within the acceptance criteria with the exception the %D for 2,4-Dintrophenol, Dinbutylphthalate, and Di-n-octylphthalate. As per the National Functional Guidelines, if the %D exceeds the acceptance criteria qualify detected results for that analyte with "J" and non-detected results for that analyte with "UJ".

The RRF's for the CC dated 12/1/03 were within the acceptance criteria. The percent difference (%D) between the average RRF's and the CC Response Factors for the CC dated 12/1/03 were within the acceptance criteria with the exception the %D for Naphthalene, Hexachlorocyclopentadiene, 2,4-Dinitrophenol, Di-n-butylphthalate, and Di-n-octylphthalate. As per the National Functional Guidelines, if the %D exceeds the acceptance criteria qualify detected results for that analyte with "J" and non-detected results for that analyte with "UJ".

4. BLANKS

One laboratory semivolatile method blank and one field blank were analyzed with this SDG. The results are summarized below.

Method Blank (MB 130795)

Di-n-butyl phthalate (0.859 ppb) was detected in the method blank extracted on 11/17/03. The results for Di-n-butyl phthalate less than 8.59 ppb were qualified with "U" for samples extracted with method blank 130795.

Bis (2-Ethylhexyl) phthalate (0.414 J ppb) was also detected in the method blank extracted on 11/17/03. The results for bis (2-Ethylhexyl) phthalate less than 4.14 ppb were qualified with "U" for samples extracted with method blank 130795.

Field Blank (SKGW00FB10065)

The presence of Di-n-butyl phthalate and bis (2-Ethylhexyl) phthalate detected in the field blank was mitigated because Di-n-butyl phthalate and bis (2-Ethylhexyl) phthalate were detected in the associated method blank.

5. SYSTEM MONITORING COMPOUND RECOVERY

All reported semivolatile system monitoring compounds were recovered within acceptable control limits with the exception of Terphenyl-d14 (25%) associated with sample SKGW58FD1008. As per the National Functional Guidelines, no action is taken when one surrogate is greater than 10% and less than the acceptance limit.

6. MATRIX SPIKE/MATRIX SPIKE DUPLICATE

Sample SKGW611008 was used for the matrix spike/matrix spike duplicate sample. The MS/MSD percent recoveries were within the acceptance criteria with the exception of 4-Nitrophenol and Pentachlorophenol in the MS and 4-Nitrophenol in the MSD. The RPD between the MS and MSD were within the acceptance criteria. As per the National Functional Guidelines, no action is taken on MS/MSD data alone.

7. INTERNAL STANDARDS PERFORMANCE

Internal standard areas and retention times were within acceptable limits for the reported semivolatile sample analyses.

8. COMPOUND IDENTIFICATION

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All reported semivolatile constituents were correctly identified with supporting chromatograms present in the data package.

9. CONSTITUENT QUANTITATION AND REPORTED DETECTION LIMITS

Constituent quantitations were correctly calculated and reported for semivolatile constituents.

10. SYSTEM PERFORMANCE

The analytical system appears to have been working well at the time of these analyses, based on the evaluation of the raw data submitted for review.

11. DOCUMENTATION

The documentation appeared accurate and in order.

12. OVERALL ASSESSMENT

There was low level Di-n-butylphthalate and bis (2-Ethylhexyl) phthalate contamination associated with the extraction/analysis of the groundwater samples. It should be noted that phthalates are a common laboratory. The presence of Di-n-butylphthalate and bis (2-Ethylhexyl) phthalate were mitigated in all of the groundwater samples. The results are acceptable with the validator-added qualifiers.

DATA VALIDATION SUMMARY – SAMPLE DELIVERY GROUP 203111311 VOLATILE ORGANIC

Validation of the GC/MS volatile organics data, as prepared by Gulf Coast Analytical Laboratories (GCAL) for the samples collected from the Skinner Landfill site in November 2003, was conducted by Earth Tech using the National Functional Guidelines for Organic Data Review, (US EPA, October, 1999), as appropriate. These data were reported by GCAL under SDG 203111311.

GCAL#	Sample Description
203111311-01	SKGW07R1008
203111311-02	SKGW06R1008
203111311-03	SKGW591008
203111311-04	SKGW601008
203111311-05	SKGW62A1008
203111311-06	SKGW641008
203111311-07	SKGWTB1008
203111311-14	SKGW581008
203111311-15	SKGW58FD1008
203111311-16	SKGWFB1008
203111311-17	SKGWTB1008
203111311-21	SKGW261008
203111311-22	SKGW301008
203111311-23	SKGW611008
203111311-24	SKGW611008 MS
203111311-25	SKGW611008 MSD
203111311-27	SKGW631008
203111311-28	SKGW241008
203111311-29	SKGWTB1008

INTRODUCTION

Analyses were performed according to CLP-Organic Analysis Low Concentration OLC02.0 SOW. Results of the sample analyses are reported by the laboratory as either qualified or unqualified. Unqualified results mean that the reported values may be used without reservation. Various qualifier codes are used by the laboratory to denote specific information regarding the analytical results. The data validation process is intended to evaluate the data on a technical basis. The data package also was subjected to an internal laboratory quality review prior to submission to Earth Tech for data validation.

During the validation process, laboratory-qualified and unqualified data are verified against all available supporting documentation. Based on this evaluation, qualifier codes may be added, deleted or modified by the data user. Final results are therefore, either qualified or unqualified. Validator-qualified results are annotated with the following codes in accordance with the Functional Guidelines:

- U The constituent was analyzed for, but was not detected above the level of the associated analytical reporting limit. The associated value is either the sample quantitation limit or the sample detection limit.
- J The analyte was positively identified; the associated numerical value is the approximate concentration of the analyte in the sample.
- UJ The analyte was not detected above the reported sample quantitation limit.

However, the reported quantitation limit is approximate and may or may not represent the actual limit of quantitation necessary to accurately and precisely measure the analyte in the sample.

R The sample results are rejected due to serious deficiencies in the ability to analyze the sample and meet quality control criteria. The presence or absence of the analyte cannot be verified.

The volatiles data validation findings and conclusions are provided in the following sections of this report:

- 1. Holding Times
- 2. GC/MS Tuning
- 3. Calibration

- A. IC
- B. CC
- 4. Blanks
- 5. System Monitoring Compound Recovery
- 6. MS/MSD
- 7. Laboratory Control Sample
- 8. Internal Standards Performance
- 9. Compound Identification
- 10. Constituent Quantitation and Reported Detection Limits
- 11. System Performance

- 12. Documentation
- 13. Overall Assessment

1. HOLDING TIMES

All samples for Volatile Organic Compounds (VOC) analyses were analyzed within the 14-day technical holding time and the 10-day VTSR method holding time. The cooler temperature upon receipt at the laboratory was within the recommended temperature of 4°C +/- 2°C.

2. GC/MS TUNING

All samples were analyzed on a single GC/MS system, identified as MSV2. Two bromofluorobenzene (BFB) tunes were run. The BFB tunes were acceptable.

3. CALIBRATION

A. Initial Calibration

Two ICs dated 11/17/03 and 11/18/03 were analyzed on Instrument MSV2 in support of the volatile sample analyses reported in the data submissions. Documentation of the IC standards was present in the data package, and RRF's as well as %RSD values were accurately reported. The criteria employed for technical data review purposes are different than those used in the method. The laboratory must meet a minimum RRF of 0.01; however, for data review purposes, a RRF criterion of "greater than or equal to 0.05" is applied to all volatile compounds. The %RSD's were within the acceptance criteria specified in the method for all target analytes.

The RRF's and the average RRF for the IC dated 11/17/03 were within the acceptance criteria specified in the method for all target analytes with the exception of Acetone and 2-Butanone. As per the National Functional Guidelines, if any initial calibration RRF is less than 0.05, qualify positive results that have acceptable mass spectral identification with "J", using professional judgement, and non-detected analytes as unusable (R).

The RRF's and the average RRF for the IC dated 11/18/03 were within the acceptance criteria specified in the method for all target analytes with the exception of Acetone and 2-Butanone. As per the National Functional Guidelines, if any initial calibration RRF is less than 0.05, qualify positive results that have acceptable mass spectral identification with "J", using professional judgement, and non-detected analytes as unusable (R).

B. Continuing Calibration

Two CC's dated 11/17/03 and 11/18/03 were analyzed on instrument MSV2 in support of the volatile sample analyses reported in the data submissions.

The percent difference (%D) between the average RRF's and the CC RF's were within the acceptance criteria for all target analytes. The CC RRF's were within the acceptance criteria specified in the method for all target analytes with the exception of Acetone and 2-Butanone. The Acetone and 2-Butanone results were previously qualified under section 3A above.

4. BLANKS

Two laboratory volatile method blanks, a storage blank, three Trip Blanks, and a Field Blank were analyzed with this SDG. The results are summarized below.

Method Blanks

1117V2BLK01 (11/17/03)

Methylene chloride was detected at a concentration of 0.14 ppb in the method blank analyzed on 11/17/03.

1118V2BLK01 (11/18/03)

There were no target analytes detected in the method blank analyzed on 11/18/03.

Storage Blank (VHBLK01)

There were no target analytes detected in the storage blank.

Trip Blank (SKGWTB1008)

The Methylene chloride detected in the Trip Blank dated 11/12/03 was mitigated by the presence of Methylene chloride in the associated method blank. Sulfur dioxide was detected (as a Tentatively Identified Compound TIC) in the Trip Blank at a concentration of 335 ppb.

Tr.p Blank (SKGWTB1008)

Sulfur dioxide was detected at a concentration of 311 ppb in the Trip Blank dated 11/13/03.

Tr.p Blank (SKGWTB1008)

There were no target analytes detected in the Trip Blank dated 11/14/03.

Field Blank (SKGWFB1008)

Ethylbenzene (0.075 ppb), Methylene chloride (0.72 ppb), Toluene (0.88 ppb), and Xylenes (0.43 ppb) were detected in the Field Blank collected on 11/13/03. The Methylene chloride detected in the Field Blank collected on 11/13/03 was mitigated by the presence of Methylene chloride in the associated method blank. Sulfur dioxide was detected (as a Tentatively Identified Compound TIC) in the Field Blank at a concentration of 5.1 ppb.

5. SYSTEM MONITORING COMPOUND RECOVERY

All reported volatile system monitoring compounds were recovered within acceptable control limits for all samples.

6. MATRIX SPIKE/MATRIX SPIKE DUPLICATE

Sample SKGW611008 was submitted for MS/MSD analysis. The percent recoveries and RDP between the MS/MSD were within the acceptance limits. A matrix spike/matrix spike duplicate is not required when analyzing samples under the CLP SOW OLC02.0

7. LABORATORY CONTROL SAMPLE

Two LCS were analyzed in conjunction with this SDG. Recoveries were within the control limit for all constituents.

8. INTERNAL STANDARDS PERFORMANCE

Internal Standard areas and retention times were within acceptable limits for the reported volatile sample analyses.

9. COMPOUND IDENTIFICATION

All reported VOCs were correctly identified with supporting chromatograms present in the data package.

10. CONSTITUENT QUANTITATION AND REPORTED DETECTION LIMITS

Constituent quantitations were correctly calculated and reported for VOCs.

11. SYSTEM PERFORMANCE

The analytical system appears to have been working well at the time of these analyses, based on the evaluation of the raw data.

12. DOCUMENTATION

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The documentation appeared accurate and in order.

13. OVERALL ASSESSMENT

The results are acceptable with the validator-added qualifiers. It should be noted that the field blank contained detectable quantities of petroleum related analytes although the constituents were not detected in any of the associated surface water samples, therefore no action was taken.

DATA VALIDATION SUMMARY - SAMPLE DELIVERY GROUP 203111311 PESTICIDES

Validation of the Gas Chromatography (GC) pesticides data, as prepared by Gulf Coast Analytical Laboratories (GCAL) for the samples collected from the Skinner Landfill site in November 2003, was conducted by Earth Tech using the National Functional Guidelines for Organic Data Review, (US EPA, October, 1999), as appropriate. These data were reported by GCAL under SDG 203111311.

GCAL #	Sample Description
203111311-01	SKGW07R1008
203111311-02	SKGW06R1008
203111311-03	SKGW591008
203111311-04	SKGW601008
203111311-05	SKGW62A1008
203111311-06	SKGW641008
203111311-14	SKGW581008
203111311-15	SKGW58FD1008
203111311-16	SKGWFB1008
203111311-21	SKGW261008
203111311-22	SKGW301008
203111311-23	SKGW611008
203111311-24	SKGW611008 MS
203111311-25	SKGW611008 MSD
203111311-27	SKGW631008
203111311-28	SKGW241008

INTRODUCTION

Analyses were performed according to CLP-Organic Analysis Multi-Media, Multi-Concentration OLM04.2 SOW. Results of the sample analyses are reported by the laboratory as either qualified or unqualified. Unqualified results mean that the reported values may be used without reservation. Various qualifier codes are used by the laboratory to denote specific information regarding the analytical results.

The data validation process is intended to evaluate the data on a technical basis. The data package also was subjected to an internal laboratory quality review prior to submission to Earth Tech for data validation.

During the validation process, laboratory-qualified and unqualified data are verified against all available supporting documentation. Based on this evaluation, qualifier codes may be added, deleted or modified by the data user. Final results are therefore, either qualified or unqualified. Validator-qualified results are annotated with the following codes in accordance with the Functional Guidelines:

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- U The constituent was analyzed for, but was not detected above the level of the associated analytical reporting limit. The associated value is either the sample quantitation limit or the sample detection limit.
- J The analyte was positively identified; the associated numerical value is the approximate concentration of the analyte in the sample.
- UJ The analyte was not detected above the reported sample quantitation limit. However, the reported quantitation limit is approximate and may or may not represent the actual limit of quantitation necessary to accurately and precisely measure the analyte in the sample.
- R The sample results are rejected due to serious deficiencies in the ability to analyze the sample and meet quality control criteria. The presence or absence of the analyte cannot be verified.

Details of the pesticide data validation findings and conclusions are provided in the following sections of this report:

- 1. Holding Times
- 2. Gas Chromatograph/Electronic Capture Detector (GC/ECD) Instrument Performance Check
- 3. IC
- 4. Calibration Verification
- 5. Blanks
- 6. Surrogate Spikes
- 7. Matrix Spike/Matrix Spike Duplicate (MS/MSD)
- 8. Pesticide Cleanup Checks
- 9. Target Compound Identification
- 10. Constituent Quantitation and Reported Detection Limits
- 11. Documentation
- 12. Overall Assessment

1. HOLDING TIMES

All samples were extracted within the seven-day technical holding time and the five-day VTSR method holding time. The cooler temperature upon receipt at the laboratory was within the recommended temperature of 4°C +/- 2°C .

2. GC/ECD INSTRUMENT PERFORMANCE CHECK

The Performance Evaluation Mixture (PEM) was analyzed at the correct frequency. Absolute retention times were within limits.

The percent resolution between adjacent peaks was within QC limits for the Pesticide Analyte Resolution Check with the exception of Endosulfan sulfate analyzed 12/01/03 on the confirmation column. The percent resolution between adjacent peaks is within QC limits for the Performance Evaluation Mixtures (PEM). The percent breakdown for both 4,4-DDT and Endrin in each PEM was less than 20.0% for both GC columns. The combined percent breakdown for 4,4-DDT and Endrin in each PEM was less than 30.0% for both GC columns.

3. INITIAL CALIBRATION

Individual standard mixtures A and B were analyzed at the correct frequencies and concentrations. The percent resolution criterion was met for Individual standard mixtures A and B.

The Percent Relative Standard Deviation (%RSD) of the calibration factors for each of the single component pesticides was less than 20%.

The multi-component target compounds were analyzed separately on both columns at a single concentration level. Retention times were determined from a minimum of three peaks.

4. CALIBRATION VERIFICATION

Absolute retention times were within appropriate time retention windows

5. BLANKS

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One laboratory method blank was analyzed with this SDG. The results are summarized below.

Method Blank 130813

No constituents were detected above the laboratory-reporting limit. This blank corresponds to all samples extracted on 11/17/03.

6. SURROGATE SPIKES

Decachlorobiphenyl (DCB) and tetrachloro-m-xylene (TCX) surrogate spike recoveries were within the acceptance criteria for all samples.

7. MATRIX SPIKE/MATRIX SPIKE DUPLICATE

Sample SKGW611008 was used for the matrix spike/matrix spike duplicate sample. The MS/MSD percent recoveries were within the acceptance criteria with the exception of gamma-BHC. The RPD between the MS and MSD were within the acceptance criteria. As per the National Functional Guidelines, no action is taken on MS/MSD data alone.

8. PESTICIDE CLEANUP CHECKS

Recoveries of all pesticides and surrogates were within 80-120% for the lot of Florisil cartridges utilized for pesticide cleanup.

9. TARGET COMPOUND IDENTIFICATION

All reported pesticide data were correctly identified with supporting chromatograms present in the data package.

10. CONSTITUENT QUANTITATION AND REPORTED DETECTION LIMITS

Constituent quantitations were correctly calculated and reported for pesticide constituents.

11. **DOCUMENTATION**

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The documentation appeared accurate and in order.

12. OVERALL ASSESSMENT

The results are acceptable with the validator-added qualifiers.

REFERENCES

US EPA, 1994. National Functional Guidelines for Inorganic Data Review.

US EPA, 1999. National Functional Guidelines for Organic Data Review.

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ANALYTICAL RESULTS

PERFORMED BY

GULF COAST ANALYTICAL LABORATORIES, INC.

Report Date 12/03/2003

GCAL Report 203111311

ADDENDUM

Deliver To Earth Tech 200 Vine Street Wilder, KY 41076 859-442-2300

Attn Pat Higgins

Customer Earth Tech

Project Skinner Landfill

CASE NARRATIVE

Client: Earth Tech Report: 203111311

Gulf Coast Analytical Laboratories received and analyzed the sample(s) listed on the sample cross-reference page of this report. Receipt of the sample(s) is documented by the attached chain of custody. This applies only to the sample(s) listed in this report. No sample integrity or quality control exceptions were identified unless noted below.

SEMI-VOLATILES MASS SPECTROMETRY

Sample 20311131115 (SKGW58FD1008) had one surrogate outside of control limits in the base-neutral fraction.

In the semi-volatile analysis, 4-Nitrophenol was recovered above QC limits in the MS/MSD. Pentachlorophenol was above the QC limit in the MSD.

Samples 20311131115 (SKGW58FD1008) and 20311131128 (SKGW241008) have elevated detection limits due to insufficient sample volume.

SEMI-VOLATILES GAS CHROMATOGRAPHY

In the analysis of the MS/MSD, the spike recovery for gamma-BHC was below QC limits. This is attributed to matrix interference.

In the analysis of RESC01 (resolution check), Methyoxychlor and Endosulfan Sulfate were not resolved on the confirmation column; however, all compounds were resolved on the initial column.

METALS

In the ILM04.1-CLP Metals analysis for prep batch 265574, the MS recovery was outside the control limits for Selenium. The LCS recovery was within control limits. This indicates the analysis is control and the sample is affected by matrix interference. A post-digestion spike was performed on the QC sample for this batch with a recovery of 0%.

In the ILM04.1-CLP Metals analysis for prep batch 265576, the MS recovery was outside the control limits for Selenium and Thallium. The LCS recovery was within control limits. This indicates the analysis is control and the sample is affected by matrix interference. A post-digestion spike was performed on the QC sample for this batch with a recovery of 0% for Selenium and 45% for Thallium.

The MS recovery is not applicable for Iron for prep batch 265574 because the sample concentration is greater than four times the spike concentration.

In the ILM04.1-CLP Metals, Aluminum, Nickel and Zinc are flagged as estimated for samples associated with prep batch 265574 due to the fact that the percent difference between the original sample result and the serial dilution result is greater than 10. A chemical or physical interference is suspected.

MISCELLANEOUS

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Samples 2031131104 (SKGW601008), 20311131105 (SKGW62A1008), 20311131112 (SKGW62A1008 (DISS)), 20311131121 (SKGW261008), 20311131122 (SKGW301008), 20311131126 (SKGW611108 DUP), and 20311131134 (SKGW611008 DUP (DISS)) had to be preserved at the laboratory with Nitric acid.

EPA SAMPLE NO.

INORGANIC	ANALYSIS	DATA	SHEET
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SKGW07R1008	
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	ROJ AAH GCAL	Contra	CC:		
Lab Code: LA	024 Case No.:	SAS N	o.:	SDG N	o.:
Matrix: (soil / w	ater) Water	Lab Sam	ple ID: 2031113110	1	
Level: (low / me	ed)	Date Red	ceived: 11/13/03		
% Solics:				_	
Concentration (Units (ug/L or mg/kg dry weig	ght) : ug/L			
CA3 No.	Analyte	Concentration	С	Q	М
7429-9()-5	Aluminum	3130		F *	Р
7440-36-0	Antimony	3.7	U		Р
7440-38-2	Arsenic	5.3	В		Р
7440-39-3	Barium	204			Р
7440-41-7	Beryllium	0.1	υ		Р
7440-43-9	Cadmium	0.2	U		Р
7440-7()-2	Calcium	246000			Р
7440-4''-3	Chromium	4.9	В		Р
7440-48-4	Cobalt	4.3	В		Р
7440-50-8	Copper	10.0	В		Р
7439-8!}-6	Iron	9890			P
7439-9:2-1	Lead	5.2			Р
7439-95-4	Magnesium	41600			Р
7439-96-5	Manganese	969			Р
7439-9''-6	Mercury	0.1	U		AV
7440-022-0	Nickel	10.5	В	Z	Р
7440-09-7	Potassium	3780	В		Р
7782-49-2	Selenium	4.4	U		Р
7440-22-4	Silver	0.4	U		Р
7440-23-5	Sodium	41200			Р
7440-28-0	Thallium	2.6	U		Р
7440-62:-2	Vanadium	6.5	В		Р
7440-66-6	Zinc	22.7		Æ	Р
57-12-5	Cyanide	3.0	U		AS

Artifacts:

Texture:

Comments:

May 100

Color A.fter:

Color E-efore:

LT.BROWN

LT.BROWN

'agar'

CLEAR

Clarity Before: CLEAR

Clarity After:

N top at

1		EPA SAMPLE NO.

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INORGANIC ANALYSIS	DATA	SHEET	CKCM06D40

_	
	CKCM06D4000
	SKGW06R1008

		SKGW06R1008
Lab Name: PROJ AAH GCAL	Contract:	
Lab Code: LA024 Case No.:	SAS No.:	SDG No.:
Matrix: (soil / water) Water	Lab Sample ID: 20311131102	
Level: (low / med)	Date Received: 11/13/03	
% Solics:		
Concentration Units (ug/L or mg/kg dry weight): ug/L		

CAS No.	Analyte	Concentration	C	Q	M]
7429-90-5	Aluminum	17000		FX	Р	15
7440-36-0	Antimony	3.7	Ü		Р	1
7440-3;3-2	Arsenic	20.5			P	7
7440-39-3	Barium	568			Р	1
7440-41-7	Beryllium	1.2	В	· · · · · · · · · · · · · · · · · · ·	Р	1
7440-43-9	Cadmium	0.2	Ü		Р	1
7440-7)-2	Calcium	378000			P	1
7440-47-3	Chromium	27.0			Р	1
7440-48-4	Cobalt	24.1	В		Р	1
7440-50-8	Copper	52.1			P	1
7439-89-6	Iron	45400			Р	1
7439-92-1	Lead	46.0			P	1
7439-95-4	Magnesium	115000			P	1
7439-96-5	Manganese	2940			Р	1
7439-97-6	Mercury	0.1	U		AV	7
7440-C2-0	Nickel	41.2		Æ	Р	1
7440-C9-7	Potassium	5050			P	1
7782-49-2	Selenium	4.4	U		P	JUJ
7440-22-4	Silver	0.4	U		P	1 -
7440-23-5	Sodium	22100			Р	7
7440-28-0	Thallium	2.6	U		P	†
7440-€2-2	Vanadium	41.5	В	· · · · · · · · · · · · · · · · · · ·	P	1
7440-€6-6	Zinc	147		P	P	17
57-12-5	Cyanide	3.0	Ü	······································	AS	1 `

1-14/25 min

Color Before:	LT.BROWN	Clarity Before:	CLEAR	Texture:	
Color After:	LT.BROWN	Clarity After:	CLEAR	Artifacts:	
Comments:					

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EPA SAMPLE NO.

INORGANIC	ANALYSIS	ΠΔΤΔ	SHEET
MODGANIC	VIAVE I 212	אואט	OULLI

Lab Name: P	ROJ AAH GCAL	Con	tract:				
Lab Ccde: LA024 Case No.:			SAS No.:		SDG No.:		
Matrix: (soil / w	vater) Water	Lab S	ample ID: 203111	31103			
Level: (low / me	ed)		Received: 11/13/0			MANAGEM AND AND AND AND AND AND AND AND AND AND	
% Solids:		Juio .					
Concentration	Units (ug/L or mg/kg dry wei	ght) : ug/L					
CAS No.	Analyte	Concentration	С	Q	M		
7429-91)-5	Aluminum	3710	 	<i>P</i> *	P	J	
7440-36-0	Antimony	3.7	U		P		
7440-33-2	Arsenic	4.3	В		Р		
7440-3:9-3	Barium	213			Р		
7440-41-7	Beryllium	0.1	U		P		
7440-4:3-9	Cadmium	0.2	U		P		
7440-70-2	Calcium	281000			Р		
7440-47-3	Chromium	19.1			P		
7440-43-4	Cobalt	7.4	В		Р		
7440-50-8	Copper	11.9	В		Р		
7439-89-6	Iron	12900	† 		P		
7439-9:2-1	Lead	10.0			Р		
7439-9:5-4	Magnesium	62400		·····	Р		
7439-96-5	Manganese	923			Р		
7439-9'7-6	Mercury	0.1	U		AV		
7440-0:2-0	Nickel	20.0	В	Z	Р		
7440-0!)-7	Potassium	31900			Р		
7782-49-2	Selenium	4.4	U		Р	UJ	
7440-22-4	Silver	0.4	U		P		
7440-23-5	Sodium	180000			Р		
7440-28-0	Thallium	2.6	U		Р		
7440-62:-2	Vanadium	5.9	В		Р		
7440-66-6	Zinc	36.3		7	Р	J	
57-12-5	Cyanide	3.0	U		AS		
					101	}/≥√ n 3 4	
Color Before:	LT.YELLOW	-	CLEAR	Textur			
Color After:	LT.YELLOW	Clarity After:	CLEAR	Artifac	ts:		
Comments:							

None of

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EPA SAMPLE NO.

		ING	ORGANIC ANALYSIS DATA	SHEET	SKGW601008	
Lab Na ne:	PROJ AAH	GCAL	Contract:			
Lab Code:	LA024	Case No.:	SAS No.:		SDG No.:	
Matrix: (soil	/water) <u>W</u>	/ater	Lab Sample ID:	20311131104		
Level: (low	/ med)		Date Received:	11/13/03		
% Solics:						
Concentrat	ion Units (ug/	L or mg/kg dry weight) : ug/L			

CAS No.	Analyte	Concentration	С	Q	М	
7429-91)-5	Aluminum	13400		/ *	Р	13
7440-36-0	Antimony	3.7	U		P	1
7440-33-2	Arsenic	11.7			Р	1
7440-39-3	Barium	89.8	В		Р	1
7440-41-7	Beryllium	0.9	В		P	1
7440-43-9	Cadmium	0.2	U		Р	1
7440-70-2	Calcium	158000			P	1
7440-47-3	Chromium	33.2			P	1
7440-48-4	Cobalt	16.6	В		P	1
7440-50-8	Copper	29.3			Р	1
7439-89-6	Iron	31300		<u> </u>	Р	1
7439-92-1	Lead	28.2			P	7
7439-95-4	Magnesium	32500			P	1
7439-96-5	Manganese	555			Р	1
7439-97-6	Mercury	0.1	U		AV	1
7440-02-0	Nickel	31.6	В	Z'	Р	1
7440-09-7	Potassium	9290			Р	1
7782-49-2	Selenium	4.4	U		Р	UJ
7440-22-4	Silver	0.4	Ū	·	P	1
7440-23-5	Sodium	212000			Р	1
7440-28-0	Thallium	2.6	U		P	1
7440-62-2	Vanadium	23.2	В		P	1
7440-66-6	Zinc	135		<u>F</u>	P	15
57-12-5	Cyanide	3.0	Ü		AS	1

44.00

12/3/25 MM

Color Before:	LT.BROWN	Clarity Before:	CLEAR	Texture:	
Color After:	LT.BROWN	Clarity After:	CLEAR	Artifacts:	
Comments:					

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EPA SAMPLE NO.

INORGANIC	ANALYSIS	DATA	SHEET
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SKGV	V62A	11	ากล
SNGV	VOZM	١ı	JUO

Lab Name: PROJ AAH GCAL	Contract:	
Lab Ccde: LA024 Case No.:	SAS No.:	SDG No.:
Matrix: (soil / water) Water	Lab Sample ID: 20311131105	
Level: i low / med)	Date Received: 11/13/03	
% Solids:		
Concentration Units (ug/L or mg/kg dry weight): ug/L		
CAS No. Analyte Concentr	ation C C	D M

CAS No.	Analyte	Concentration	С	Q	М]
7429-9()-5	Aluminum	24100		X X	P	1
7440-36-0	Antimony	3.7	U		Р	1
7440-38-2	Arsenic	17.7			P	1
7440-39-3	Barium	633			Р	
7440-4′-7	Beryllium	1.5	В		Р	1
7440-45-9	Cadmium	1.1	В		Р	1
7440-7(-2	Calcium	618000			Р	1
7440-47-3	Chromium	49.5			P	1
7440-48-4	Cobalt	33.5	В		P	1
7440-5(-8	Copper	72.8			Р	1
7439-89-6	Iron	60800			P	1
7439-92-1	Lead	72.8			Р	1
7439-95-4	Magnesium	137000			Р	1
7439-9€-5	Manganese	3380			P	1
7439-97-6	Mercury	0.1	U		AV	1
7440-02-0	Nickel	64.3		Z	Р	1
7440-09-7	Potassium	15100			Р	1
7782-49-2	Selenium	4.4	U		Р	UJ
7440-22-4	Silver	0.4	U		Р	1
7440-23-5	Sodium	121000		· · · · · · · · · · · · · · · · · · ·	P	1
7440-28-0	Thallium	2.6	U		Р	1
7440-62-2	Vanadium	40.5	В		P	1
7440-66-6	Zinc	181		Æ	P	丁
57-12-5	Cyanide	3.0	U		ÁS	1 -

10/2/05 mm

Color Before:	DR.BROWN	Clarity Before:	CLEAR	Texture:	
Color After:	DR.BROWN	Clarity After:	CLEAR	Artifacts:	**************************************
Commer ts:					

EPA SAMPLE NO.

INORGANIC ANALYSIS DATA SHEE	INORGANIC	ANALYSIS	DATA	SHEE
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SKGW641008

Lab Name: PROJ AAH GCAL Lab Code: LA024 Case No.:	Contract:	SDG No.:
Matrix: (soil / water) Water	Lab Sample ID: 20311131106	
Level: (low / med) % Solicls:	Date Received: 11/13/03	
John Strain Control of the Control o		

Concentration Units (ug/L or mg/kg dry weight) : ug/L

144 m/

CAS No.	Analyte	Concentration	С	Q	М	1
7429-9()-5	Aluminum	18700		/ *	Р	1
7440-36-0	Antimony	3.7	U		P	ี ี
7440-38-2	Arsenic	10.8			Р	1
7440-39-3	Barium	95.9	В		P	1
7440-4:1-7	Beryllium	1.0	В	——————————————————————————————————————	Р	
7440-43-9	Cadmium	0.2	U		Р	
7440-70-2	Calcium	311000			P	٦
7440-4''-3	Chromium	29.4			P	
7440-48-4	Cobalt	23.1	В		P	1
7440-5()-8	Copper	16.3	В		P	1
7439-89-6	Iron	42900			Р	1
7439-9:2-1	Lead	20.0			P	7
7439-95-4	Magnesium	77300			P	1
7439-96-5	Manganese	2390			P	1
7439-9''-6	Mercury	0.1	U		AV	7
7440-02-0	Nickel	46.0			Р	7
7440-09-7	Potassium	14700			P	1
7782-49-2	Selenium	4.4	U		Р	∃ u:
7440-22-4	Silver	0.4	U		Р	7
7440-23-5	Sodium	68300			P	1
7440-28-0	Thallium	2.6	U		Р	7
7440-62-2	Vanadium	27.3	В		P	7
7440-66-6	Zinc	114		Æ	Р	75
57-12-5	Cyanide	3.0	U		AS	٦ [

10/7/05

Color Eefore:	LT.BROWN	Clarity Before:	CLEAR	Texture:	
Color After:	LT.BROWN	Clarity After:	CLEAR	Artifacts:	
Comments:					

INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO.

SKGW07R1008	(DISS)	

Lab Name: PROJ AAH GCAL	Contract:	<u></u>	
Lab Code: LA024 Case No.:	SAS No.:		SDG No.:
Matrix: (soil / water) Water	Lab Sample ID:	20311131108	
Level: (low / med)	Date Received:	11/13/03	
% Solits:			
Concentration Units (ug/L or mg/kg dry weight): ug/L			

CAS No.	Analyte	Concentration	С	Q	M	-
7429-90-5	Aluminum	25.8	U	······································	P	1
744C-36-0	Antimony	3.7	U		Р	7
744()-38-2	Arsenic	4.5	В		Р	٦
7440-39-3	Barium	131	В	······································	P	٦
7440-41-7	Beryllium	0.1	U		Р	٦
744-0-43-9	Cadmium	0.2	υ		Р	7
74-10-70-2	Calcium	229000			P	٦
7440-47-3	Chromium	0.8	υ		P	٦
7440-48-4	Cobalt	1.4	В		Р	٦
7440-50-8	Copper	1.2	U	***************************************	P	٦
7439-89-6	Iron	3580		***************************************	Р	٦
7439-92-1	Lead	1.5	U		P	٦
'439-95-4	Magnesium	33000			P	٦
7439-96-5	Manganese	849			P	7
7439-97-6	Mercury	0.1	U		AV	1
7440-02-0	Nickel	1.6	В		Р	1
7440-09-7	Potassium	3260	В		Ρ	٦
7782-49-2	Selenium	4.4	U	N	P	٦
7440-22-4	Silver	0.4	U	······································	Р	1
7440-23-5	Sodium	42200		* - · · · · · · · · · · · · · · · · · · 	Р	1
7440-28-0	Thallium	2.6	U	N	Р	1
7440-62-2	Vanadium	0.8	U	······································	P	7
7440-66-6	Zinc	30.7			Р	1

10/7/5 Min

Color Before:	COLORLESS	Clarity Before:	CLEAR	Texture:	
Color After:	COLORLESS	Clarity After:	CLEAR	Artifacts:	
Comments:					

EPA SAMPLE NO.

INORGANIC ANALYSIS DATA SHEET

SKGW06R1008	(DISS)
SING PRODITIONS	(000)

Lab Name: PROJ AAH GCAL	Contract:	
Lab Code: LA024 Case No.:	SAS No.:	SDG No.:
Matrix: (soil / water) Water	Lab Sample ID: 20311131109	
Level: (low / med)	Date Received: 11/13/03	
% Solids:		

Concentration Units (ug/L or mg/kg dry weight): ug/L

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CAS No.	Analyte	Concentration	С	Q	М	7
7429-90-5	Aluminum	25.8	U	· · · · · · · · · · · · · · · · · · ·	P	7
7440-3:5-0	Antimony	3.7	U		P	1
7440-3-3-2	Arsenic	2.9	U		P	7
7440-3:3-3	Barium	294			Р	٦
7440-41-7	Beryllium	0.1	U		Р	7
7440-4:3-9	Cadmium	0.2	U		P	7
7440-7()-2	Calcium	189000			P	7
7440-4''-3	Chromium	0.8	U		Р	1
7440-48-4	Cobalt	0.4	U		Р	1
7440-5()-8	Copper	1.7	В		Р	7
7439-89-6	Iron	14.1	Ü		P	7
7439-92:-1	Lead	1.5	Ü		P	7
7439-95-4	Magnesium	30500			P	٦
7439-96-5	Manganese	76.7			Р	7
7439-97-6	Mercury	0.1	υ		AV	7
7440-02:-0	Nickel	1.8	В		P	7
7440-08-7	Potassium	2400	В		P	٦
7782-49-2	Selenium	4.4	U	N	Р	F
7440-22-4	Silver	0.4	U		Р	7
7440-23-5	Sodium	21500			Р	7
7440-28-0	Thallium	2.6	U	N	Р	7
7440-62-2	Vanadium	0.8	U		Р	7
7440-66-6	Zinc	0.6	U		Р	7

Color Before:	COLORLESS	Clarity Before:	CLEAR	Texture:
Color Af:er:	COLORLESS	Clarity After:	CLEAR	Artifacts:
Comments:				

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EPA SAMPLE NO.

INORGANIC	ANALYSIS	DATA	SHEET
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SK	GW59	91008	3 (DIS	3)

Lab Name: Pl	ROJ AAH GCAL	Contra	act:		<u></u>		
Lab Ccde: LA024 Case No.:			SAS No.:		SDG No.:		
		Lab Sam					
Level: (low / me	ed)		ceived: 11/13/03				
% Solids:			***************************************				
Concentration	Units (ug/L or mg/kg dry weig	ht) : ug/L					
CAS No.	Analyte	Concentration	С	Q	М	1	
7429-90-5	Aluminum	25.8	U		P	1	
7440-36-0	Antimony	6.5	В		P	1	
7440-38-2	Arsenic	2.9	U		P	1	
7440-39-3	Barium	40.7	В		P	1	
7440-41-7	Beryllium	0.1	- 		Р	1	
7440-43-9	Cadmium	0.2	- 		P	1	
7440-70-2	Calcium	261000		**	P	┪	
7440-47-3	Chromium	0.8	U -		Р	-	
7440-48-4	Cobalt	0.4	u		P	1	
7440-50-8	Copper	4.0	В		Р	1	
7439-89-6	Iron	14.1	U		P	1	
7439-92-1	Lead	1.5	U -		Р	1	
7439-95-4	Magnesium	59500			Р	1	
7439-96-5	Manganese	27.3			P	7	
7439-97-6	Mercury	0.1	U		AV	1	
7440-02-0	Nickel	2.3	В		Р	1	
7440-09-7	Potassium	29800			Р	1	
7782-49-2	Selenium	4.4	U	,N	P	† R	
7440-22-4	Silver	0.4	U -		Р	1	
7440-23-5	Sodium	186000		·	Р	1	
7440-28-0	Thallium	2.6	U	N	Р	us	
7440-62-2	Vanadium	0.8	U		Р		
7440-€6-6	Zinc	0.6	U		Р] uj	
						polalos pin	
Color Before:	COLORLESS		CLEAR	Textur			
Color After:	COLORLESS	Clarity After: C	CLEAR	Artifac	ts:		
Comments:							

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EPA SAMPLE NO.

INORGANIC ANALY	010	DATA	SHEET
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SKGW601008	(DISS)
011011001000	(DIOO)

				Sk	(GW601008 (I	oiss)
Lab Name: P	PROJ AAH GCAL	Conti	ract:			
Lab Ccde: LA	A024 Case No.:	SAS	No.:	SDG	€ No.:	
Matrix: (soil / w	vater) Water	Lab Sa	mple ID: _2031	1131111		
Level: (low / m	ned)	Date R	eceived: 11/13	3/03		
% Solids:						
Concentration	Units (ug/L or mg/kg dry weig	ht): ug/L				
CAS No.	Analyte	Concentration	С	Q	М	1
7429-9()-5	Aluminum	25.8	υ		P	1
7440-36-0	Antimony	3.7	U		Р	
					-	4

CAS No.	Analyte	Concentration	С	Q	M	7
7429-90-5	Aluminum	25.8	υ		P	1
7440-36-0	Antimony	3.7	U		P	1
7440-38-2	Arsenic	2.9	υ		P	1
7440-39-3	Barium	28.7	В		Р	7
7440-4' -7	Beryllium	0.1	υ		P	1
7440-43-9	Cadmium	0.2	U		Р	1
7440-7()-2	Calcium	100000			P	7
7440-47-3	Chromium	0.8	U		Р	7
7440-48-4	Cobalt	0.4	U		Р	7
7440-5()-8	Copper	4.2	В		P	٦
7439-89-6	Iron	14.1	U		Р	٦
7439-92:-1	Lead	1.5	U		P	7
7439-95-4	Magnesium	20100			P	7
7439-9€-5	Manganese	2.4	В		Р	7
7439-97-6	Mercury	0.1	Ü		AV	7
7440-02-0	Nickel	0.7	U		P	1
7440-08-7	Potassium	6970			Р	7
7782-49-2	Selenium	4.4	U	N	Р	7 8
7440-22-4	Silver	0.4	U		Р	7
7440-23-5	Sodium	201000			Р	1
7440-28-0	Thallium	2.6	U	N	Р	่าน
7440-62-2	Vanadium	0.8	В		Р	7
7440-66-6	Zinc	0.6	U		Р	่ ีน′

Color Before:	COLORLESS	Clarity Before:	CLEAR	Texture:	
Color Alter:	COLORLESS	Clarity After:	CLEAR	Artifacts:	
Comments:					

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INORGANIC ANALYSIS DATA SHEET

FPA	SAMPL	F NO
	C/ (IVII L	

Lab Name: PROJ AAH GCAL	Contract:	
Lab Code: LA024 Case No.:	SAS No.:	SDG No.:
Matrix: (soil / water) Water	Lab Sample ID: 20311131112	
Level: (low / med)	Date Received: 11/13/03	
% Solids:		

Concentration Units (ug/L or mg/kg dry weight): ug/L

CAS No.	Analyte	Concentration	С	Q	М]
7429-90-5	Aluminum	25.8	U		P	1
7440-36-0	Antimony	3.7	U		Р	1
7440-38-2	Arsenic	2.9	U		P	1
7440-39-3	Barium	126	В		Р	1
440-41-7	Beryllium	0.1	U		Р	1
7440-43-9	Cadmium	0.2	U		P	1
7440-70-2	Calcium	123000			Р	1
7440-47-3	Chromium	0.8	U		P	1
7440-48-4	Cobalt	0.4	U		P	1
7440-50-8	Copper	2.7	В		P	1
7439-89-6	Iron	14.1	U		Р	1
7439-92-1	Lead	1.5	U		Р	7
7439-95-4	Magnesium	49200			Р	1
7439-96-5	Manganese	51.4			P	7
7439-97-6	Mercury	0.1	U		AV	7
7440-(12-0	Nickel	0.9	В		Р	_
7440-09-7	Potassium	10800			Р	7
7782-4-9-2	Selenium	4.4	U	N	Р	18
7440-2:2-4	Silver	0.4	U		Р	7
7440-2:3-5	Sodium	120000			P	1
7440-2:8-0	Thallium	2.6	U	N	Р	่ไน∄
7440-6i2-2	Vanadium	0.8	U		P	1 ^
7440-66-6	Zinc	0.9	В		Р	7

10/7/05 MIGH

Color Before:	COLORLESS	Clarity Before:	CLEAR	Texture:	
Color After:	COLORLESS	Clarity After:	CLEAR	Artifacts:	
Comments:					

FPA	SAME	LE NO

INORGANIC	ANALYSIS	DATA	SHEET
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SKGW641008	(DISS)
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Lab Name: PROJ AAH GCAL	Contract:	
Lab Code: LA024 Case No.:	SAS No.:	SDG No.:
Matrix: (soil / water) Water	Lab Sample ID: 20311131113	######################################
Level: (low / med)		
% Solids:	Date Received: 11/13/03	

Concentration Units (ug/L or mg/kg dry weight): ug/L

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CAS No.	Analyte	Concentration	С	Q	M	7
7429-90-5	Aluminum	25.8	U		P	7
7440-36-0	Antimony	3.7	U		P	1
7440-38-2	Arsenic	2.9	U		Р	1
7440-39-3	Barium	44.6	В	·	P	1
7440-41-7	Beryllium	0.1	U	·	P	7
7440-43-9	Cadmium	0.2	U		P	7
7440-70-2	Calcium	185000			P	7
7440-47-3	Chromium	0.8	Ü		P	7
7440-48-4	Cobalt	0.5	В		P	7
7440-50-8	Copper	3.4	В		P	7
7439-89-6	Iron	14.1	υ		P	7
7439-92-1	Lead	1.5	U		P	7
7439-95-4	Magnesium	61800			Р	7
743:9-96-5	Manganese	292			P	7
7439-97-6	Mercury	0.1	U		ĀV	7
744 3-02-0	Nickel	5.2	В		P	7
7440-09-7	Potassium	12300			P	7
7782-49-2	Selenium	4.4	U	N	P	TR
7440-22-4	Silver	0.4	U		P	7 ·
744-0-23-5	Sodium	67600			P	7
7440-28-0	Thallium	2.6	U	N	P	√u:
7440-62-2	Vanadium	0.8	υ		Р	7
74-10-66-6	Zinc	2.6	В	· · · · · · · · · · · · · · · · · · ·	P	7 7

Color Before:	COLORLESS	Clarity Before:	CLEAR	Texture:	Recognition sign was per referre with the processory accounts and account to the account
Color After:	COLORLESS	Clarity After:	CLEAR	Artifacts:	
Comments:					

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EPA SAMPLE NO.

INORGANIC ANALYSIS DATA SHEE	INORGANIC	ANALYSIS	DATA	SHEE
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SKGW581008	
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Lab Name: PROJ AAH GCAL	Contract:	
Lab Code: LA024 Case No.:	SAS No.:	SDG No.:
Matrix: (soil / water) Water	Lab Sample ID: 20311131114	
Level: (low / med)	Date Received: 11/14/03	
% Solids:		
Concentration Units (ug/L or mg/kg dry weight): ug/L		

CAS No. Analyte С Q Concentration M **F** * 7429-90-5 Aluminum 41600 P J 7440-36-0 Antimony 3.7 Ū Р 7440-38-2 Arsenic 32.9 Р 7440-39-3 Barium 822 P 2.9 Р 7440-41-7 Beryllium В 7440-43-9 Cadmium 1.8 В Р P 7440-70-2 745000 Calcium 7440-47-3 Chromium 112 P 7440-48-4 Cobalt 57.2 Р 7440-50-8 Copper 138 P 7439-89-6 Iron 129000 Р 7439-92-1 Lead 92.7 P 148000 7439-95-4 Magnesium Р 7439-96-5 Manganese 4200 P 7439-97-6 Mercury 0.1 υ ĀV 7440-02:-0 Nickel 124 5 Р 7440-09-7 Potassium 11800 P 7782-49-2 Selenium U Р UJ 4.4 7440-22-4 Silver 1.6 В Р 7440-23-5 Sodium 36900 Р 7440-28-0 Thallium 2.6 U Р

74.0

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7440-62:-2

7440-66-6

57-12-5

Vanadium

Cyanide

Zinc

7017105 MM

J

Р

Р

AS

F

Color Before:	DR.BROWN	Clarity Before:	CLEAR	Texture:	
Color After:	DR.BROWN	Clarity After:	CLEAR	Artifacts:	Annual Section of the
Comments:					

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SKGW58FD1008	
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Lab Name: Pl	ROJ AAH GCAL	Contra	ict:)
Lab Code: LA	024 Case No.: _	SAS N	SDG No	SDG No.:		
Matrix: (soil / w	ater) Water	Lab Sam	nple ID: _203111:	31115		
Level: (low / me	ed)	Date Re	ceived: _11/14/0	3		
% Solics:						
Concentration	Units (ug/L or mg/kg dry weigh	nt) : ug/L				
CAS No.	Analyte	Concentration	С	Q	М	
7429-9()-5	Aluminum	22700		<i>F</i> *	Р	丁
7440-36-0	Antimony	3.7	U		Р	_
7440-38-2	Arsenic	23.2			Р	
7440-39-3	Barium	1000			P	
7440-4′-7	Beryllium	1.0	В		Р	
7440-43-9	Cadmium	0.2	U		Р	
7440-7()-2	Calcium	852000			Р	
7440-47-3	Chromium	60.2			Р	
7440-48-4	Cobalt	34.1	В		P	
7440-5()-8	Copper	57.9			Р	1
7439-89-6	Iron	74600			P	1
7439-92-1	Lead	39.1		. , . ,	Р	1
7439-95-4	Magnesium	79500			Р	1
7439-96-5	Manganese	5360			Р	1
7439-97-6	Mercury	0.1	U		AV	
7440-02-0	Nickel	76.9		F/	Р	
7440-09-7	Potassium	10900			Р	1
7782-49-2	Selenium	4.4	U		Р	UJ
7440-22-4	Silver	0.5	В		Р	
7440-23-5	Sodium	38800			Р	
7440-28-0	Thallium	2.6	U		P	
7440-62:-2	Vanadium	40.3	В		Р	
7440-66-6	Zinc	172		Æ	Р	丁
57-12-5	Cyanide	3.0	U		AS	1
57-12-5	Cyanide	3.0	U		L	elglot msk
Color Before:	DR.BROWN	Clarity Before: C	LEAR	Texture	9 :	

Clarity After:

CLEAR

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DR.BROWN

Color After: Comments:

Artifacts:

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Color After:

Comments:

COLORLESS

EPA SAMPLE NO.

SKGWFB1008	

Lab Name: PF	ROJ AAH GCAL	Contra	nct:			
Lab Code: LA	Case No.:	SAS N	lo.:	SDG No.:		
Matrix: (soil / wa	ater) Water	Lab Sam	nple ID: 2031113111	6		
Level: (low / me	ed)	Date Re	ceived: 11/14/03			
% Solicis:						
Concentration I	Jnits (ug/L or mg/kg dry weigh	nt): ug/L				
CAS No.	Analyte	Concentration	С	Q	М	
7429-9()-5	Aluminum	25.8	U	F *	P	8 pice
7440-36-0	Antimony	3.7	U		Р	
7440-33-2	Arsenic	2.9	U		Р	
7440-3:3-3	Barium	0.7	В		Р	
7440-41-7	Beryllium	0.1	Ū		Р	
7440-4:3-9	Cadmium	0.2	U		Р	
7440-70-2	Calcium	118	В		Р	
7440-47-3	Chromium	0.8	U		Р	
7440-43-4	Cobalt	0.4	U		Р	
7440-5)-8	Copper	1.6	В		Р	
7439-89-6	Iron	30.8	В		Р	
7439-92-1	Lead	1.5	U		Р	
7439-95-4	Magnesium	100	В		Р	
7439-93-5	Manganese	2.5	В		Р	
7439-97-6	Mercury	0.1	U		AV	
7440-02-0	Nickel	0.7	υ	×	P	
7440-03-7	Potassium	42.1	U		Р	
7782-4 3-2	Selenium	4.4	Ū		Р	uJ
7440-22-4	Silver	0.4	U		Р	
7440-23-5	Sodium	45.4	U		Р	
7440-23-0	Thallium	2.6	υ .		Р	
7440-62-2	Vanadium	3.3	В		Р	
7440-63-6	Zinc	0.6	U	5	Р	us
57-12-5	Cyanide	3.0	U		AS	
						10 tales mr
Color Before:	COLORLESS	Clarity Before: C	CLEAR	Texture:		

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CLEAR

Clarity After:

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Artifacts:

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EPA SAMPLE NO.

INORGANIC ANALYSIS D	AIA	SHEEL
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SKGW581008 (DISS)

Lab Name: PROJ AAH GCAL	Contract:	
Lab Code: LA024 Case No.:	SAS No.:	SDG No.:
Matrix: (soil / water) Water	Lab Sample ID: 20311131118	
Level: (low / med)	Date Received: 11/14/03	
% Solids:		
Concentration Units (ug/L or mg/kg dry weight): ug/L		

CAS No.	Analyte	Concentration	С	Q	М	1
7429-90-5	Aluminum	25.8	U		Р	7
7440-36-0	Antimony	3.7	U		Р	٦
7440-38-2	Arsenic	6.0	В		Р	٦
7440-39-3	Barium	228			P	٦
7440-41-7	Beryllium	0.1	U		Р	٦
7440-43-9	Cadmium	0.2	U		Р	٦
7440-70-2	Calcium	96400			Р	٦
7440-4.7-3	Chromium	0.8	U		Р	٦
7440-4-8-4	Cobalt	0.4	В		Р	٦
7440-50-8	Copper	1.2	U		Р	٦
7439-89-6	Iron	2890			P	٦
7439-92-1	Lead	1.5	U		Р	٦
7439-95-4	Magnesium	32800			Р	
7439-96-5	Manganese	354			P	٦
7439-97-6	Mercury	0.1	U		AV	٦
7440-()2-0	Nickel	1.3	В		P	٦
7440-()9-7	Potassium	5210			Р	٦
7782-49-2	Selenium	4.4	U	N	Р	7
7440-22-4	Silver	0.4	U		P	٦
7440-23-5	Sodium	34400			P	٦
7440-:28-0	Thallium	2.6	U	N	Р	
7440-132-2	Vanadium	0.8	U		Р	٦
7440-136-6	Zinc	0.6	Ü		P	↰

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Color Before:	COLORLESS	Clarity Before:	CLEAR	Texture:	
Color After:	COLORLESS	Clarity After:	CLEAR	Artifacts:	
Comments:					

INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO.

SKGW58FD1008 (DISS)	

Lab Name:	PROJ AAH GO	CAL	Cont	tract:						
Lab Ccde: <u>L</u>	A024	Case No.:	SAS	No.:			SDG No	.:		
Matrix: (soil /	water) Wat	er	Lab Sa	mple ID:	20311	131119				
Level: (low / r	med)	·····	Date R	Received:	11/14	03				
% Solids:										
Concentratio	n Units (ug/L c	or mg/kg dry weight) : ug/L							
CAS No.	T	Analyte	Concentration	С		(Į	М	1	

CAS No.	Analyte	Concentration	С	Q	M
7429-90-5	Aluminum	25.8	U		Р
7440-36-0	Antimony	5.2	В		Р
7440-58-2	Arsenic	8.0	В		Р
7440-39-3	Barium	278			P
7440-41-7	Beryllium	0.1	U		Р
7440-43-9	Cadmium	0.2	U		P
7440-''0-2	Calcium	91700			Р
7440~17-3	Chromium	0.8	U		Р
7440~18-4	Cobalt	0.6	В		Р
7440-50-8	Copper	2.0	В		P
7439-39-6	Iron	704			Р
7439-32-1	Lead	1.5	U		Р
7439-35-4	Magnesium	33100			P
7439-96-5	Manganese	246			Р
7439-97-6	Mercury	0.1	U		AV
7440-02-0	Nickel	3.6	В		P
7440-09-7	Potassium	5910			Р
7782-49-2	Selenium	4.4	U	N	P
7440-22-4	Silver	0.4	U		P
7440-23-5	Sodium	35700			P
7440-28-0	Thallium	2.6	U	N	Р
7440-62-2	Vanadium	0.8	U		P
7440-66-6	Zinc	0.6	U		Р

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Color Before:	COLORLESS	Clarity Before:	CLEAR	Texture:	
Colc r After:	COLORLESS	Clarity After:	CLEAR	Artifacts:	
Comments:					

INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE N

SKGWFB1008 (DISS)	

Lab Name: PROJ AAH GCAL	Contract:	
Lab Code: LA024 Case No.:	SAS No.:	SDG No.:
Matrix: (soil / water) Water	Lab Sample ID: 20311131120	
Level: (low / med)	Date Received: 11/14/03	
% Solids:		

Concentration Units (ug/L or mg/kg dry weight): ug/L

CAS No.	Analyte	Concentration	С	Q	M	7
7429-90-5	Aluminum	25.8	U	 	P	٦
7440-36-0	Antimony	3.7	U		Р	٦
7440-38-2	Arsenic	2.9	U		P	٦
7440-39-3	Barium	0.3	В		Р	٦
7440-41-7	Beryllium	0.1	U		Р	٦
7440-43-9	Cadmium	0.2	U		P	٦
7440-70-2	Calcium	41.4	В		Р	٦
7440-47-3	Chromium	0.8	U		P	٦
7440-48-4	Cobalt	0.4	Ü		Р	٦
7440-50-8	Copper	1.5	В		Р	٦
7439-39-6	Iron	14.1	U		Р	٦
7439-92-1	Lead	1.5	U		Р	П
7439-35-4	Magnesium	109	В		Р	
7439-96-5	Manganese	0.2	Ü		P	
7439-97-6	Mercury	0.1	U		AV	٦
7440-02-0	Nickel	0.7	В		P	٦
7440-09-7	Potassium	42.1	Ü		P	٦
7782-49-2	Selenium	4.4	U	N	Р	٦
7440-22-4	Silver	0.4	U		P	٦
7440-23-5	Sodium	45.4	U		P	٦
7440-28-0	Thallium	2.6	U	N	P	٦
7440-62-2	Vanadium	3.5	В		P	7
7440-66-6	Zinc	0.6	U		Р	٦

Color Before:	COLORLESS	Clarity Before:	CLEAR	Texture:	
Color After:	COLORLESS	Clarity After:	CLEAR	Artifacts:	
Comments:					

EPA SAMPLE NO. INORGANIC ANALYSIS DATA SHEET

			SKGW261008	1
Lab Name: PROJ AAH GCAL	Contract:	<u></u>		}
Lab Coce: LA024 Case No.:	SAS No.:		SDG No.:	
Matrix: (soil / water) Water	Lab Sample iD:	20311131121		.
Level: (low / med)	Date Received:	11/15/03		
% Solid s:				
Concentration Units (ug/L or mg/kg dry weight) :	ug/L			

CAS No.	Analyte	Concentration	С	Q	М	1
7429-9C-5	Aluminum	3860		£ 'À	Р	15
7440-3E-0	Antimony	3.7	υ		Р	1
7440-38-2	Arsenic	2.9	В		Р	1
7440-39-3	Barium	352			Р	1
7440-41-7	Beryllium	0.2	В		Р	1
7440-45-9	Cadmium	0.5	В		P	1
7440-7()-2	Calcium	96700		-	Р	7
7440-47-3	Chromium	20.6			P	1
7440-48-4	Cobalt	5.8	В		Р	7
7440-50-8	Copper	20.1	В		Р	1
7439-8!}-6	Iron	10300			P	1
7439-9:2-1	Lead	8.5			Р	7
7439-95-4	Magnesium	41900		 	Р	
7439-96-5	Manganese	320		· · · · · · · · · · · · · · · · · · ·	P	1
7439-97-6	Mercury	0.1	U	·	AV	1
7440-02-0	Nickel	16.8	В	X	Р	1
7440-03-7	Potassium	19100			Р	1
7782-49-2	Selenium	4.4	U		Р	T u3
7440-22-4	Silver	0.4	U		P	1
7440-23-5	Sodium	173000			Р	1
7440-28-0	Thallium	2.6	U		Р	1
7440-62-2	Vanadium	2.2	В		P	1
7440-66-6	Zinc	32.2		Æ	P	1 丁
57-12-5	Cyanide	3.0	u u		AS	1

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Color Before:	COLORLESS	Clarity Before:	CLEAR	Texture:	
Color After:	COLORLESS	Clarity After:	CLEAR	Artifacts:	
Comments:					

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EPA SAMPLE NO.

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301008

Lab Narne: Pl	ROJ AAH GCAL	Con	ntract:	<u> </u>		
Lab Code: LA			S No.:	SDG No	o.:	
Matrix: (soil / w	rater) Water	Lab S	Sample ID: 20311	131122		
Level: (low / me	ed)	Date	Received: 11/15/	03		
% Solids:						
Concentration	Units (ug/L or mg/kg dry weig	ht): ug/L				
CAS No.	Analyte	Concentration	С	Q	М	
7429-90-5	Aluminum	516		FX	P	J
7440-36-0	Antimony	3.7	U		P	
7440-3:3-2	Arsenic	2.9	U		Р	
7440-39-3	Barium	318			Р	
7440-41-7	Beryllium	0.1	U		P	
7440-43-9	Cadmium	0.2	В		Р	
7440-70-2	Calcium	61000			Р	
7440-47-3	Chromium	6.0	В		Р	
7440-48-4	Cobalt	0.4	U		Р	
7440-50-8	Copper	8.4	В		Р	
7439-89-6	Iron	2090			P	
7439-92-1	Lead	1.5	U		Р	
7439-95-4	Magnesium	29200			P	
7439-96-5	Manganese	48.2			Р	
7439-97-6	Mercury	0.1	U		AV	
7440-()2-0	Nickel	4.5	В	Æ	Р	
7440-09-7	Potassium	12700		- 	Р	
7782-49-2	Selenium	4.4	U		P	UJ
7440-:22-4	Silver	0.4	U		Р	
7440-:23-5	Sodium	145000	1		Р	
7440-28-0	Thallium	2.6	U		Р	
7440-32-2	Vanadium	0.8	U		P	
7440-56-6	Zinc	6.5	В	Æ	Р	J
57-12-5	Cyanide	3.0	Ū		AS	
					jo	19125 MWL
Color Before:	COLORLESS	Clarity Before:	CLEAR	Texture	e:	
Color After:	COLORLESS	Clarity After:	CLEAR	Artifact	s:	
Comments:						

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EPA SAMPLE NO.

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SKGW611008

		THOROUGH THE THE	, DATE	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	SKGW	/611008	
Lab Name: Pl	ROJ AAH GCAL	Cont	ract:				
Lab Code: <u>LA</u>	.024 Case No.:	SAS	No.:		_ SDG No		
Matrix: (soil / w	rater) <u>Water</u>	Lab Sa	mple ID:	20311131123			
Level: (low / me	ed)	Date R	eceived:	11/15/03			
% Solids:	The contract of the contract o				•		
Concentration	Units (ug/L or mg/kg dry we	ight) : ug/L					
CAS No.	Analyte	Concentration	С		Q	M	
7429-9()-5	Aluminum	1080			F *	Р	ゴ
7440-36-0	Antimony	3.7	U			Р	
7440-38-2	Arsenic	3.7	В			P	

CAS No.	Analyte	Concentration	С	Q	М	}
7429-90-5	Aluminum	1080		7 *	Р	1
7440-36-0	Antimony	3.7	U		Р	1
7440-38-2	Arsenic	3.7	В		P	1
7440-39-3	Barium	91.3	В		Р	1
7440-41-7	Beryllium	0.1	U		Р	1
7440-43-9	Cadmium	0.2	U		Р	1
7440-7()-2	Calcium	190000			Р	1
7440-4''-3	Chromium	2.1	В		P	1
7440-48-4	Cobalt	3.3	В		Р	1
7440-5()-8	Copper	4.2	В		Р	1
7439-89-6	Iron	8640			Р	1
7439-92-1	Lead	1.6	В		Р	1
7439-95-4	Magnesium	37500			Р	1
7439-96-5	Manganese	922			Р	1
7439-97-6	Mercury	0.1	U		AV	1
7440-02!-0	Nickel	7.6	В	Z	Р	1
7440-09-7	Potassium	9430			Р	1
7782-49-2	Selenium	4.4	U		Р	นป
7440-22:-4	Silver	0.4	U		Р	1
7440-23-5	Sodium	27700			Р	1
7440-28-0	Thallium	2.6	U		P	1
7440-62-2	Vanadium	0.8	V		Р	1
7440-6€-6	Zinc	13.8	В	Ŋ.	P	1.7
57-12-5	Cyanide	3.0	υ		AS	1

Color Before:	LT.YELLOW	Clarity Before:	CLEAR	Texture:	
Color After:	COLORLESS	Clarity After:	CLEAR	Artifacts:	
Comments:					

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1 INORGANIC ANALYSIS DATA SHEET

EPA	SAMPL	E NO
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		3KGV011000 W3	
Lab Name: PROJ AAH GCAL	Contract:		
Lab Ccde: LA024 Case No.:	SAS No.:	SDG No.:	
Matrix: (soil / water) Water	Lab Sample ID: 2031113112	4	
Level: (low / med)	Date Received: 11/15/03		
0/ 0-84			

Concentration Units (ug/L or mg/kg dry weight): ug/L

CAS No.	Analyte	Concentration	С	Q	M	1
7429-90-5	Aluminum	3310		P*	Р	T
7440-36-0	Antimony	105		<i>F F</i>	Р	1
7440-38-2	Arsenic	50.5			P	1
7440-39-3	Barium	2060			Р	1
7440-41-7	Beryllium	52.5			Р	7
7440-43-9	Cadmium	47.2			Р	7
7440-70-2	Calcium	197000			Р	1
7440-47-3	Chromium	203			Р	7
7440-48-4	Cobalt	482			Р	7
7440-50-8	Copper	262			P	1
7439-89-6	Iron	10300			Р	1
7439-92-1	Lead	22.0			Р	1
7439-95-4	Magnesium	39000			Р	7
7439-96-5	Manganese	1450		····	Р	1
7439-97-6	Mercury	5.8			AV	7
7440-C2-0	Nickel	490		,Æ	P	7
7440-C9-7	Potassium	10100			Р	7
7782-49-2	Selenium	5.2			Р	us
7440-22-4	Silver	50.6			P	7
7440-23-5	Sodium	26700			Р	┥
7440-28-0	Thallium	38.4			Р	7
7440-62-2	Vanadium	505			Р	7
7440-66-6	Zinc	508		, Z	Р	1
57-12-5	Cyanide	101		· _ · · · · · · · · · · · · · · · · · ·	AS	7

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Color Before:	LT.YELLOW	Clarity Before:	CLEAR	Texture:	
Color After:	LT.YELLOW	Clarity After:	CLEAR	Artifacts:	
Comments:					

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INORGANIC ANALYSIS DATA SHEET

EPA	SAMPLE NO.	

SKGW611008 DUP	

Lab Name: PROJ AAH GCAL	Contract:	
Lab Ccde: LA024 Case No.:	SAS No.:	SDG No.:
Matrix: (soil / water) Water	Lab Sample ID: 20311131126	
Level: (low / med)	Date Received: _11/15/03	
% Solids:		

Concentration Units (ug/L or mg/kg dry weight): ug/L

12.00

CAS No.	Analyte	Concentration	С	Q	М
7429-90-5	Aluminum	1310		PX	P
7440-36-0	Antimony	3.7	U		Р
7440-38-2	Arsenic	7.2	В		Р
7440-39-3	Barium	97.4	В		Р
7440-41-7	Beryllium	0.1	U		Р
7440-43-9	Cadmium	0.2	U		Р
7440-70-2	Calcium	199000			Р
7440-47-3	Chromium	2.3	В		Р
7440-48-4	Cobalt	3.4	В		P
7440-5i0-8	Copper	4.6	В		Р
7439-89-6	Iron	9270			P
7439-92-1	Lead	1.8	В		P
7439-95-4	Magnesium	39200	-		P
7439-96-5	Manganese	963			P
7439-97-6	Mercury	0.1	U		AV
7440-()2-0	Nickel	7.6	В	K	P
7440-()9-7	Potassium	10300			P
7782-49-2	Selenium	4.4	U	· · · · · · · · · · · · · · · · · · ·	Р
7440-22-4	Silver	0.4	U		P
7440-23-5	Sodium	27000	- 1	<u> </u>	Р
7440-28-0	Thallium	2.6	Ü		Р
7440-62-2	Vanadium	0.8	U		Р
7440-66-6	Zinc	11.9	В	₽	P
57-12-5	Cyanide	3.0	U		AS

10/7/05 max

Color Before:	LT.YELLOW	Clarity Before:	CLEAR	Texture:	A-100-00-00-00-00-00-00-00-00-00-00-00-00
Color After:	LT.YELLOW	Clarity After:	CLEAR	Artifacts:	-
Comments:					

INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO.

SKGW631008		
SDC No.		

Lab Name: PROJ AAH GCAL	Contract:	
Lab Ccde: LA024 Case No.:	SAS No.:	SDG No.:
Matrix: (soil / water) Water	Lab Sample ID: 20311131127	
Level: (low / med)	Date Received: 11/15/03	
% Solids:		

Concentration Units (ug/L or mg/kg dry weight): ug/L

11-12-F

CAS No.	Analyte	Concentration	С	Q	M	7
7429-90-5	Aluminum	10500		Z*	Р	15
7440-36-0	Antimony	3.7	U		Р	7 ~
7440-38-2	Arsenic	9.3	В		P	7
7440-39-3	Barium	147	В		P	
7440-41-7	Beryllium	0.6	В		Р	7
7440-43-9	Cadmium	0.2	U		P	7
7440-70-2	Calcium	465000			Р	7
7440-4.7-3	Chromium	13.7			Р	7
7440-48-4	Cobalt	17.5	В		Р	7
7440-50-8	Copper	17.4	В		P	1
7439-89-6	Iron	25800			Р	1
7439-92-1	Lead	23.4			P	7
7439-95-4	Magnesium	96100			Р	1
7439-96-5	Manganese	4090			Р	1
7439-97-6	Mercury	0.1	U		AV	1
7440-02-0	Nickel	31.0	В	Æ	Р	7
7440-1)9-7	Potassium	13500			P	7
7782-19-2	Selenium	4.4	U		P	7 U2
7440-:22-4	Silver	0.4	U		P	1
7440-:23-5	Sodium	73600			Р	1
7440-28-0	Thallium	2.6	Ü		Р	7
7440- 32-2	Vanadium	17.8	В		Р	1
7440-36-6	Zinc	66.3	·	×	P	75
57-12-5	Cyanide	3.0	- i		ĀS	1

Color Before:	DR.BROWN	Clarity Before:	CLEAR	Texture:	
Color After:	LT.BROWN	Clarity After:	CLEAR	Artifacts:	
Comments:					

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EPA SAMPLE NO.

INORGANIC	ANALYSIS	DATA	SHEET
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		SKOWZ41000
Lab Name: PROJ AAH GCAL	Contract:	
Lab Code: LA024 Case No.:	SAS No.:	SDG No.:
Matrix: (soil / water) Water	Lab Sample ID: 203111311	28
Level: (low / med)	Date Received: 11/15/03	
% Solids:	- \	
Concentration Units (ug/L or mg/kg dry weight) : ug/L		

CAS No.	Analyte	Concentration	С	Q	М]
7429-90-5	Aluminum	13000		J X	Р	13
7440-36-0	Antimony	3.7	U		Р	1
7440-38-2	Arsenic	8.4	В		Р	1
7440-39-3	Barium	162	В		Р	1
7440-41-7	Beryllium	0.7	В		Р	1
7440-43-9	Cadmium	0.2	U		Р	1
7440-70-2	Calcium	544000			Р	1
7440-47-3	Chromium	19.5			Р	1
7440-48-4	Cobalt	13.9	В		Р	1
7440-50-8	Copper	21.6	В		Р	1
7439-89-6	Iron	30500			Р	1
7439-82-1	Lead	20.8			Р	1
7439-95-4	Magnesium	73800			Р	1
7439-96-5	Manganese	1960			Р	1
7439-97-6	Mercury	0.1	U		AV	1
7440-C2-0	Nickel	28.2	В	.7.	Р	1
7440-C9-7	Potassium	6610			P	1
7782-49-2	Selenium	4.4	U		Р	141
7440-22-4	Silver	0.4	U		Р	1 '-
7440-23-5	Sodium	31500			Р	1
7440-28-0	Thallium	2.6	U		Р	1
7440-62-2	Vanadium	26.6	В		P	1
7440-66-6	Zinc	63.1		P	Р	17
57-12-5	Cyanide	3.0	Ū		AS	1

10/7/65

Color Before:	LT.GRAY	Clarity Before:	CLEAR	Texture:	
Color After:	LT.GRAY	Clarity After:	CLEAR	Artifacts:	****
Comments:					

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EPA SAMPLE NO.

INORGANIC	ANALYSIS	DATA	SHEET
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SKGW261008 (DISS)

Lab Name: P	ROJ AAH GCAL	Contra	act:		 -	
Lab Ccde: LA	.024 Case No.:	SAS N	lo.:	SDG N	lo.:	
	vater) Water		nple ID: 203111	31130		
Level: (low/ma	ed)		ceived: 11/15/0			······································
% Solids:						
Concentration	Units (ug/L or mg/kg dry weig	ht) : ug/L				
CAS No.	Analyte	Concentration	С	Q	М	7
7429-90-5	Aluminum	25.8	U		P	-
7440-36-0	Antimony	4.1	В		P	1
7440-38-2	Arsenic	5.9	В		P	1
7440-39-3	Barium	344			P	1
7440-41-7	Beryllium	0.1	U		P	1
7440-43-9	Cadmium	0.2	U	-	P	†
7440-70-2	Calcium	69200	-		P	┪
7440-47-3	Chromium	0.8	U I		P	1
7440-48-4	Cobalt	1.0	В		P	†
7440-50-8	Copper	2.0	В		P	-
7439-89-6	Iron	442			P	7
7439-92-1	Lead	1.5	U		P	1
7439-95-4	Magnesium	38500		· ·	P	7
7439-96-5	Manganese	134			P	-
7439-97-6	Mercury	0.1	U		AV	1
7440-(12-0	Nickel	1,7	В		P	7
7440-(19-7	Potassium	19500			Р	
7782-4-9-2	Selenium	4,4	U	N	P	R
7440-2:2-4	Silver	0,4	U		P	┦ ```
7440-23-5	Sodium	187000			Р	1
7440-28-0	Thallium	2.6	U	N	P	Tui
7440-62-2	Vanadium	0.8	Ū		P	†
7440-66-6	Zinc	0.6	U		P	Tu5
					101	1365 pu
Color Before:	COLORLESS	-	LEAR	Textu		
Color After:	COLORLESS	Clarity After: C	LEAR	Artifa	cts:	
Comments:						

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EPA SAMPLE NO.

INORGANIC	ANALYSIS	DATA	SHEET

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Color Before:

Color After:

Comments:

COLORLESS

COLORLESS

SKGW301008 (DISS)

Lab Name: Pf	ROJ AAH GCAL	Contra	ct:		
Lab Ccde: <u>LA</u>	024 Case No.:	SAS No	0.:	SDG No.:	<u>,</u>
Matrix: (soil / w	ater) Water	Lab Sam	ple ID: 203111311:	31	
Level: (low / me	ed)	Date Per	ceived: 11/15/03		
% Solids:		Date Net	Jeived. 11/13/03	·······	
	Units (ug/L or mg/kg dry we	ight) : ug/L			
Concentration	onits (ag/L of mg/kg ary we	igitt). ug/L			
CAS No.	Analyte	Concentration	С	Q	М
7429-90-5	Aluminum	25.8	U		P
7440-36-0	Antimony	3.7	U		Р
7440-38-2	Arsenic	2.9	U		P
7440-39-3	Barium	334			Р
7440-41-7	Beryllium	0.1	U		Р
7440-43-9	Cadmium	0.2	U		Р
7440-70-2	Calcium	60800			Р
7440-47-3	Chromium	0.8	U		Р
7440-48-4	Cobalt	0.4	U		Р
7440-50-8	Copper	5.4	В		Р
7439-89-6	Iron	427			P
7439-92-1	Lead	1.5	U		Р
7439-95-4	Magnesium	28900			Р
7439-96-5	Manganese	29.5			Р
7439-97-6	Mercury	0.1	U		AV
7440-()2-0	Nickel	0.7	U		P
7440-()9-7	Potassium	12600			Р
7782-49-2	Selenium	4.4	Ü	N	PR
7440-22-4	Silver	0.4	U		Р
7440-23-5	Sodium	146000			Р
7440-28-0	Thallium	2.6	Ü	N	PUS
7440-62-2	Vanadium	0.8	U		Р
7440-136-6	Zinc	0.6	U		PUS

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CLEAR

Clarity Before: CLEAR

Clarity After:

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Texture:

Artifacts:

EPA SAMPLE NO.

INORGANIC .	ANALYSIS	DATA	SHEET
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SKGW61100	1221A) 8

SKGW611008 (DISS)							
Lab Name: P	PROJ AAH GCAL	Contra	ect:				
Lab Ccde: LA	Case No.:	SAS N	o.:	SDG	No.:		
Matrix: (soil / w	vater) Water	Lab Sam	ple ID: 203111	31132			
Level: (low / m	ned)	Date Re	ceived: 11/15/0	03			
% Solids:							
Concentration	Units (ug/L or mg/kg dry weig	ght) : ug/L					
CAS No.	Analyte	Concentration	С	Q	М		
7429-90-5	Aluminum	25.8	U		Р		
7440-36-0	Antimony	3.7	U		Р	ł	
7440-38-2	Arsenic	7.5	В		Р	İ	
7440-39-3	Barium	83.3	В		Р	1	
	12					1	

CAS No.	Analyte	Concentration	С	Q	M	1
7429-90-5	Aluminum	25.8	U		Р	1
7440-36-0	Antimony	3.7	U		Р	1
7440-38-2	Arsenic	7.5	В		Р	1
7440-39-3	Barium	83.3	В		Р	1
7440-41-7	Beryllium	0.1	υ		P	1
7440-43-9	Cadmium	0.2	U		Р	1
7440-70-2	Calcium	191000			Р	1
7440-47-3	Chromium	0.8	U		Р	1
7440-48-4	Cobalt	2.0	В		Р	1
7440-50-8	Copper	1.2	U		Р	1
7439-89-6	Iron	5100			Р	1
7439-92-1	Lead	1.5	U		Р	1
7439-95-4	Magnesium	35700			P	
7439-96-5	Manganese	866			Р	
7439-97-6	Mercury	0.1	U		AV	1
7440-(2-0	Nickel	4.0	В		Р	7
7440-09-7	Potassium	10100			Р	7
7782-49-2	Selenium	4.4	U	N	Р	18
7440-22-4	Silver	0.4	U		Р	1
7440-23-5	Sodium	28300			Р	1 .
7440-28-0	Thallium	2.6	Ü	N	Р	us
7440-62-2	Vanadium	0.8	U		Р	_ [
7440-66-6	Zinc	4.8	В		Р	us

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Color Before:	COLORLESS	Clarity Before:	CLEAR	Texture:	
Color After:	COLORLESS	Clarity After:	CLEAR	Artifacts:	
Comments:					

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INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO.

	l l	3KGVV611006 WG (DISS)
Lab Name: PROJ AAH GCAL	Contract:	
Lab Code: LA024 Case No.:	SAS No.:	SDG No.:
Matrix: (soil / water) Water	Lab Sample ID: 20311131133	
Level: (low / med)	Date Received: 11/15/03	
% Solids:		
Concentration Units (ug/L or mg/kg dry weight): ug/	'L	

CAS No.	Analyte	Concentration	С	Q	М]
7429-90-5	Aluminum	2120		 	Р	1
7440-36-0	Antimony	111			Р	1
7440-38-2	Arsenic	49.8			Р	1
7440-39-3	Barium	2090			Р	1
7440-4-1-7	Beryllium	53.1			P	1
7440-43-9	Cadmium	47.3			P	1
7440-70-2	Calcium	195000		 	Р	1
7440-47-3	Chromium	206			Р	1
7440-48-4	Cobalt	491			Р	1
7440-50-8	Copper	262			Р	1
7439-39-6	Iron	6000			P	1
7439-32-1	Lead	18.8			P	1
7439-35-4	Magnesium	36900			P	1
7439-36-5	Manganese	1400			P	1
7439-37-6	Mercury	5.1			AV	1
7440-32-0	Nickel	492			P	1
7440-39-7	Potassium	10200			P	1
7782-49-2	Selenium	4.4	U	N	P	R
7440-22-4	Silver	51.7			Р	1
7440-23-5	Sodium	27600			Р	1
7440-28-0	Thallium	36.8		N	Р	7
7440-52-2	Vanadium	521			P	1
7440-66-6	Zinc	506			Р	7.7

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Colo: Before:	COLORLESS	Clarity Before:	CLEAR	Texture:	
Color After:	COLORLESS	Clarity After:	CLEAR	Artifacts:	
Comments:					

INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO.

	SKGW611008 DUP (DISS)
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Lab Name: PROJ AAH GCAL	Contract:	<u> </u>	
Lab Ccde: LA024 Case No.:	SAS No.:		SDG No.:
Matrix: (soil / water) Water	Lab Sample ID:	20311131134	
Level: (low / med)	Date Received:	11/15/03	
% Solids:			

Concentration Units (ug/L or mg/kg dry weight): ug/L

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CAS No.	Analyte	Concentration	С	Q	М
7429-90-5	Aluminum	25.8	U		P
7440-36-0	Antimony	3.7	U		Р
7440-38-2	Arsenic	4.1	В		Р
7440-39-3	Barium	82.5	В		Р
7440-41-7	Beryllium	0.1	U		Р
7440-43-9	Cadmium	0.2	U		Р
7440-70-2	Calcium	194000			Р
7440-47-3	Chromium	0.8	U		Р
7440-48-4	Cobalt	1.9	В		Р
7440-50-8	Copper	1.2	U		Р
7439-89-6	Iron	5000			Р
7439-92-1	Lead	1.5	U		Р
7439-95-4	Magnesium	37200			Р
7439-96-5	Manganese	902			Р
7439-97-6	Mercury	0.1	U		AV
7440-()2-0	Nickel	3.9	В		Р
7440-()9-7	Potassium	10400			P
7782-49-2	Selenium	4.4	Ú	N	Р
7440-22-4	Silver	0.4	U		Р
7440-23-5	Sodium	27600			P
7440-28-0	Thallium	2.6	U	N	P
7440-62-2	Vanadium	0.8	U		P
7440-66-6	Zinc	1.5	В	<u> </u>	Р

Color Before:	COLORLESS	Clarity Before:	CLEAR	Texture:
Color After:	COLORLESS	Clarity After:	CLEAR	Artifacts:
Comments:				

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EPA SAMPLE NO.

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SKGW631008 (DISS)

Lab Name: PROJ AAH GCAL Lab Ccde: LA024 Case No.:		Contract:				
		SAS	S No.:	SDG	SDG No.:	
Matrix: (soil / w	ater) Water	Lab S	ample ID: 203	11131135		
Level: (low / med)		Date	Received: 11/	15/03		
% Solids:	en (- MA					
Concentration (Units (ug/L or mg/kg dry weigh	nt): ug/L				
CAS No.	Analyte	Concentration	. C	Q	M	
7429-90-5	Aluminum	25.8	U		Р	
7440-36-0	Antimony	3.7	U		Р	
7440-38-2	Arsenic	5.4	В		P	
7440-39-3	Barium	68.6	В		Р	
7440-41-7	Beryllium	0.1	U		Р	
7440-43-9	Cadmium	0.2	U		P	
7440-70-2	Calcium	278000		<u> </u>	Р	
7440-47-3	Chromium	0.8	U		Р	
7440-48-4	Cobalt	4.1	В		P	
7440-50-8	Соррег	1.2	U		P	
7439-89-6	Iron	1150			P	
7439-92-1	Lead	1.5	U		Р	
7439-95-4	Magnesium	61000			P	
7439-96-5	Manganese	2600	1.	+	P	
7439-97-6 7440-02-0	Mercury Nickel	6.9	U B		AV P	
7440-02-0	Potassium	11600			 	
7782-49-2	Selenium	4.4	U	N	PPE	
7440-22-4	Silver	0.4	 		+	
7440-23-5	Sodium	72100	 		- P	
7440-28-0	Thallium	2.6	· · · ·	N	PUS	
7440-52-2	Vanadium	0.8	- U		P	
7440-136-6	Zinc	3.7	В		P 3	
					1613/2 me	
Color Before:	COLORLESS	Clarity Before:	CLEAR	Texto	ure:	
Color After:	COLORLESS	Clarity After:	CLEAR	Artifa	acts:	Name of the state

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Comments:

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EPA SAMPLE NO.

INORGANIC	ANALYSIS	DATA	SHEET
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SKGW241008 (DISS)

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Lab Name: PI	ROJ AAH GCAL	Co	ntract:			
Lab Code: LA024 Case No.:			S No.:	SDG N	0.:	
Matrix: (soil / w	ater) Water	Lab S	Sample ID: _20311	131136		
Level: (low / me	ed)	Date	Received: 11/15/	03		
% Solids:		Date	11710			
Concentration	Units (ug/L or mg/kg dry weigh	nt): ug/L				
CAS No.	Analyte	Concentration	С	Q	М	
7429-90-5	Aluminum	25.8	U		Р	
7440-36-0	Antimony	3.7	U		P	
7440-38-2	Arsenic	3.6	В		Р	
7440-39-3	Barium	90.4	В		Р	
7440-41-7	Beryllium	0.1	U		Р	
7440-43-9	Cadmium	0.2	U		Р	
7440-70-2	Calcium	111000			Р	
7440-47-3	Chromium	0.8	U		Р	
7440-48-4	Cobalt	0.4	В		P	
7440-50-8	Copper	2.1	В		Р	
7439-89-6	iron	1000			Р	
7439-92-1	Lead	1.5	υ		Р	
7439-95-4	Magnesium	26400			Р	
7439-96-5	Manganese	169			Р	
7439-97-6	Mercury	0.1	U		AV	
7440-()2-0	Nickel	0.7	U		Р	
7440-09-7	Potassium	3210	В		Р	
7782-49-2	Selenium	4.4	U	N	PR	
7440-22-4	Silver	0.4	U		Р	
7440-23-5	Sodium	29300			Р	
7440-28-0	Thallium	2.6	U	N	P UJ	
	Vanadium	0.9	В		Р	
7440-36-6	Zinc	1.9	В		I P J	
7440-:23-5 7440-:28-0 7440-:52-2 7440-:56-6	Thallium Vanadium	2.6	В	N	P UJ	
Color Before:	COLORLESS COLORLESS	Clarity Before: Clarity After:	CLEAR CLEAR	Textur Artifac		
Comments:						

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Lab Name:	GCAL		Contract:	
Lab Code:	LA024	Case No.:	SAS No.:	SDG No.: 203111311
Calibration (Source:	106-41-2 CPI	Instrument ID: ICP5	ICAL ID: 2
			Date Analyzed: 11/21/03	Time: 1101

Analyte	True	Found	CAL %R	Units	Method	Туре
Antimony	120	120	100	ug/L	ILM04.1 - CLP Metals	Р
Arsenic	20.0	17.0	85	ug/L	ILM04.1 - CLP Metals	Р
Berylliurn	10.0	9.60	96	ug/L	ILM04.1 - CLP Metals	Р
Cadmium	10.0	9.50	95	ug/L	ILM04.1 - CLP Metals	Р
Chromit m	20.0	19.1	95	ug/L	ILM04.1 - CLP Metals	Р
Cobalt	100	93.3	93	ug/L	ILM04.1 - CLP Metals	Р
Copper	50.0	47.3	95	ug/L	ILM04.1 - CLP Metals	Р
Lead	6.00	5.10	86	ug/L	ILM04.1 - CLP Metals	Р
Manganese	30.0	29.4	98	ug/L	ILM04.1 - CLP Metals	Р
Nickel	80.0	75.5	94	ug/L	ILM04.1 - CLP Metals	Р
Selenium	10.0	8.60	86	ug/L	ILM04.1 - CLP Metals	Р
Silver	20.0	19.7	98	ug/L	ILM04.1 - CLP Metals	Р
Thallium	20.0	20.6	103	ug/L	ILM04.1 - CLP Metals	Р
Vanadium	100	97.4	97	ug/L	ILM04.1 - CLP Metals	Р
Zinc	40.0	27.9	(70)	ug/L	ILM04.1 - CLP Metals	Р

Lab Name:	GCAL		Contract:	
Lab Code:	LA024	Case No.:	SAS No.:	SDG No.: 203111311
Calibration (Source:	106-41-2 CPI	Instrument ID: ICP5	ICAL ID: 2
			Date Analyzed: 11/21/0	03 Time: 1419

Analyte	True	Found	CAL %R	Units	Method	Туре
Antimony	120	124	103	ug/L	ILM04.1 - CLP Metals	Р
Arsenic	20.0	18.2	91	ug/L	ILM04.1 - CLP Metals	Р
Berylliurn	10.0	9.50	95	ug/L	ILM04.1 - CLP Metals	Р
Cadmium	10.0	9.20	92	ug/L	ILM04.1 - CLP Metals	Р
Chromium	20.0	19.8	99	ug/L	ILM04.1 - CLP Metals	Ρ
Cobalt	100	95.0	95	ug/L	ILM04.1 - CLP Metals	Р
Copper	50.0	47.6	95	ug/L	ILM04.1 - CLP Metals	Р
Lead	6.00	5.40	90	ug/L	ILM04.1 - CLP Metals	Р
Manganese	30.0	29.4	98	ug/L	ILM04.1 - CLP Metals	Р
Nickel	80.0	76.4	96	ug/L	ILM04.1 - CLP Metals	Р
Selenium	10.0	11.8	118	ug/L	ILM04.1 - CLP Metals	Р
Silver	20.0	19.6	98	ug/L	ILM04.1 - CLP Metals	Р
Thallium	20.0	16.6	83	ug/L	iLM04.1 - CLP Metals	Р
Vanadium	100	102	102	ug/L	ILM04.1 - CLP Metals	Р
Zinc	40.0	27.9	€70 <u>\</u>	ug/L	ILM04.1 - CLP Metals	Р

Lab Name:	GCAL		Contract:	
Lab Code:	LA024	Case No.:	SAS No.:	SDG No.: 203111311
Calibration (Source:	106-41-2 CPI	Instrument ID: ICP5	ICAL ID: 2
			Date Analyzed: 11/21/03	Time: 1721

Analyte	True	Found	CAL %R	Units	Method	Туре
Antimor y	120	122	101	ug/L	ILM04.1 - CLP Metals	Р
Arsenic	20.0	17.1	85	ug/L	ILM04.1 - CLP Metals	Р
Beryllium	10.0	9.40	94	ug/L	ILM04.1 - CLP Metals	Р
Cadmiu n	10.0	9.10	91	ug/L	ILM04.1 - CLP Metals	Р
Chromium	20.0	19.2	96	ug/L	ILM04.1 - CLP Metals	Р
Cobalt	100	94.0	94	ug/L	ILM04.1 - CLP Metals	Р
Copper	50.0	46.3	93	ug/L	ILM04.1 - CLP Metals	Р
Lead	6.00	5.50	91	ug/L	ILM04.1 - CLP Metals	Р
Mangar ese	30.0	28.9	96	ug/L	ILM04.1 - CLP Metals	Р
Nickel	80.0	75.5	94	ug/L	ILM04.1 - CLP Metals	Р
Seleniu n	10.0	11.0	110	ug/L	ILM04.1 - CLP Metals	Р
Silver	20.0	19.5	98	ug/L	ILM04.1 - CLP Metals	Р
Thallium	20.0	16.7	83	ug/L	ILM04.1 - CLP Metals	Р
Vanadium	100	99.4	99	ug/L	ILM04.1 - CLP Metals	Р
Zinc	40.0	28.0	\~70\	ug/L	ILM04.1 - CLP Metals	Р

Lab Name:	GCAL		Contract:	
Lab Code:	LA024	Case No.:	SAS No.:	SDG No.: 203111311
Calibration 9	Source:	106-41-2 CPI	Instrument ID: ICP5	ICAL ID: 2
			Date Analyzed: 11/21/03	Time: 2024

Analyte	True	Found	CAL %R	Units	Method	Туре
Antimony	120	122	102	ug/L	ILM04.1 - CLP Metals	Р
Arsenic	20.0	18.9	95	ug/L	ILM04.1 - CLP Metals	Р
Beryllium	10.0	9.50	95	ug/L	ILM04.1 - CLP Metals	Р
Cadmiu n	10.0	9.00	90	ug/L	ILM04.1 - CLP Metals	Р
Chromium	20.0	19.3	97	ug/L	ILM04.1 - CLP Metals	Р
Cobalt	100	94.1	94	ug/L	ILM04.1 - CLP Metals	Р
Copper	50.0	47.2	94	ug/L	ILM04.1 - CLP Metals	Р
Lead	6.00	5.30	89	ug/L	ILM04.1 - CLP Metals	Р
Mangarese	30.0	29.3	98	ug/L	ILM04.1 - CLP Metals	Р
Nickel	80.0	75.5	94	ug/L	ILM04.1 - CLP Metals	Р
Seleniu m	10.0	13.9	(139	ug/L	ILM04.1 - CLP Metals	Р
Silver	20.0	19.5	98	ug/L	ILM04.1 - CLP Metals	Р
Thallium	20.0	20.8	104	ug/L	ILM04.1 - CLP Metals	Р
Vanadium	100	100	190	ug/L	ILM04.1 - CLP Metals	Р
Zinc	40.0	28.3	(71	ug/L	ILM04.1 - CLP Metals	Р

Lab Name:	GCAL		Contract:			
Lab Code:	LA024	Case No.:	SAS No.:		SDG No.:	203111311
Calibration	Source:	106-41-2 CPI	Instrument ID:	ICP5	ICAL	ID: 2
			Date Analyzed:	11/21/03	Time:	2212

Analyte	True	Found	CAL %R	Units	Method	Туре
Antimony	120	123	103	ug/L	ILM04.1 - CLP Metals	Р
Arsenic	20.0	17.2	86	ug/L	ILM04.1 - CLP Metals	Р
Beryllium	10.0	9.60	96	ug/L	ILM04.1 - CLP Metals	Р
Cadmium	10.0	9.10	91	ug/L	ILM04.1 - CLP Metals	Р
Chromiu n	20.0	19.4	97	ug/L	ILM04.1 - CLP Metals	Р
Cobalt	100	94.6	95	ug/L	ILM04.1 - CLP Metals	Р
Copper	50.0	49.1	98	ug/L	ILM04.1 - CLP Metals	Р
Lead	6.00	5.40	90	ug/L	ILM04.1 - CLP Metals	Ρ
Manganese	30.0	29.6	99	ug/L	ILM04.1 - CLP Metals	Р
Nickel	80.0	75.9	95	ug/L	ILM04.1 - CLP Metals	Р
Selenium	10.0	16.4	(164)	ug/L	ILM04.1 - CLP Metals	Р
Silver	20.0	20.2	101	ug/L	ILM04.1 - CLP Metals	Р
Thallium	20.0	24.0	120	ug/L	ILM04.1 - CLP Metals	Р
Vanadiurn	100	101	101	ug/L	ILM04.1 - CLP Metals	Р
Zinc	40.0	28.1	(70 \	ug/L	ILM04.1 - CLP Metals	Р

Lab Name:	PROJ AAH GCAL		Contract:				
Lab Code:	LA024	Case No.:	SAS No.:		SDG No.:		
Preparation	Blank Matrix: (soil /	water) Water					

Preparation Blank Concentration Units: (ug/L / mg/kg) ug/L

	Initial								Prepa	-	1
	Calib.		Contin	uing	Calibrat	ion B	lank (ug/	L)	ration		
Analyte	Blank								Blank		
7 that y to	(ug/L)	С	1	С	2	С	3	С		С	М
Aluminurn	-38.4	В	25.8	U	25.8	ΤŪ	-44.3	В	-29.275	В	Р
Antimony	3.7	U	6.7	В	3.7	U	6.2	В	4.454	В	Р
Arsenic	2.9	U	2.9	U	-3.1	В	2.9	U	2.900	U	Р
Barium	0.3	Ū	0.3	U	0.3	U	0.3	U	0.300	U	Р
Beryllium	0.2	В	0.2	В	0.1	U	0.1	Ū	0.164	В	Р
Cadmium	0.2	U	0.2	Ü	-0.3	В	0.2	U	0.200	U	Р
Calcium	7.5	U	7.5	U	7.5	U	7.5	U	7.500	U	Р
Chromium	0.8	U	0.8	U	0.8	U	0.8	U	0.800	Ü	Р
Cobalt	0.4	U	0.4	В	0.4	U	0.4	U	0.714	В	Р
Copper	4.4	В	2.9	В	1.5	В	2.4	В	1.307	В	P
Iron	22.7	В	31.0	В	14.1	U	14.1	U	25.425	В	Р
Lead	1.5	В	1.5	U	1.5	U	1.5	U	1.500	U	Р
Magnesium	40.3	В	92.0	В	39.8	В	96.1	В	99.726	В	Р
Manganese	0.2	U	0.2	U	-0.5	В	0.2	U	0.295	В	Р
Mercury	0.1	U	0.1	Ū	0.1	υ	0.1	U	0.100	U	AV
Nickel	0.8	В	0.7	В	0.7	U	0.7	Ū	1.038	В	Р
Potassium	42.1	U	42.1	U	42.1	U	42.1	U	42.100	Ü	Р
Selenium	4.4	U	4.4	U	4.4	Ū	4.4	U	4.400	U	Р
Silver	0.4	U	-1	В	0.4	U	-1	В	-0.816	В	Р
Sodium	-126.2	В	-159.2	В	-220.2	В	-200.4	В	-118.77	В	Р
Thallium	3.5	В	2.6	υ	2.6	υ	2.6	υ	2.600	υ	Р
Vanadium	0.8	U	0.8	U	4.1	В	3.0	В	0.800	U	Р
Zinc	-7.7	В	-8.9	В	-11.9	В	-11.1	В	-5.669	В	Р
Cyanide	3.0	U	3.0	Ü	3.0	U	3.0	U	3.000	U	AS

Lab Name: PROJ AAH GCAL			Contract:						
Lab Code:	LA024 Case No.:		SAS No.:	SDG No.:					
Preparation	Blank Matrix: (soil /	water) Water							

							<u> </u>				
	Initial Calib.		Contin	wina	Calibrat	tion R	lank (ug/	/1.\	Prepa- ration	-	
	1		Conti	lullig	Calibra	uon b	ialik (ug/	(L)			
Analyte	Blank								Blank		
	(ug/L)	С	4	С	5	С	6	С		С	М
Aluminu n			-94.3	В	-70.8	В	-73.0	В	-72.080	В	Р
Antimony			3.7	U	7.7	В	3.7	U	3.700	U	P
Arsenic			2.9	U	2.9	U	2.9	U	2.900	U	Р
Barium			0.3	U	0.3	Ū	0.3	U	0.300	U	Р
Berylliur1		Τ	0.1	U	0.1	U	0.1	U	0.100	U	P
Cadmium			-0.3	В	0.2	Ū	0.2	Ü	-0.2790	В	Р
Calcium			13.9	В	7.5	Ū	7.5	U	28.052	В	P
Chromit m			0.8	U	0.8	U	0.8	Ū	0.800	U	Р
Cobalt			0.4	U	0.4	Ü	0.4	U	0.400	U	Р
Copper		T	1.2	В	4.9	В	2.4	В	1.200	U	Р
Iron		Т	14.1	U	14.1	U	14.1	U	14.100	U	Р
Lead			1.5	U	1.5	U	1.5	U	1.500	Ü	P
Magnesium			-70.7	В	36.7	U	-61.5	В	36.700	Ū	Р
Manganese			0.2	U	0.2	U	-0.2	В	0.423	В	Р
Mercury		T	0.1	U	0.1	U		1	0.100	U	ΑV
Nickel	1	1	0.7	U	0.7	U	0.7	Ū	0.700	Ū	Р
Potassium		T	42.1	υ	42.1	U	42.1	U	42.100	Ū	Р
Selenium		\top	4.4	U	4.4	U	4.4	U	4.400	Ū	Р
Silver		T	-0.7	В	0.4	U	-0.4	В	-0.793	В	Р
Sodium			-236.5	В	-211.9	В	-249.7	В	-225.250	В	Р
Thallium	1		2.6	U	2.6	U	-4.0	В	2.600	Ū	P
Vanadit m			4.0	В	3.1	В	3.5	В	3.078	В	Р
Zinc			-11.9	В	-10.5	В	-12.1	В	-5.780	В	Р
Cyanide		T	3.0	U						Ī	AS

Preparation Blank Concentration Units: (ug/L / mg/kg) ug/L

"He gare"

Lab Name:	PROJ AAH GCAL		Contract:	 	
Lab Code:	LA024	Case No.:	SAS No.:	 SDG No.:	
Preparation	Blank Matrix: (soil /	water)			

Preparation Blank Concentration Units: (ug/L / mg/kg)

Analyte	Initial Calib. Blank	Continuing Calibration Blank (ug/L)						Prepa- ration Blank			
	(ug/L)	С	7	С	8	С	9	С		С	М
Aluminum		Τ	-66.0	В	-66.1	В					P
Antimon		T	9.7	В	11.4	В				1	Р
Arsenic		T	-3.1	В	2.9	U					Р
Barium		Τ	0.3	U	0.3	U					Р
Beryllium		T	0.1	В	0.1	В					Р
Cadmiurn		T	0.2	U	0.2	U					Р
Calcium		T	7.5	U	10.1	В					Р
Chromium		T	0.8	υ	0.8	U					Р
Cobalt		T	0.6	В	0.4	В					Р
Copper		T	6.6	В	5.9	В					Р
Iron			14.1	U	14.1	Īυ					Р
Lead		T	1.5	U	1.5	U					Р
Magnesium		T	36.7	U	44.7	В					Р
Manganese		T	0.2	U	0.2	U					Р
Mercury		T							-		ΑV
Nickel			0.7	U	0.7	U					Р
Potassium		T	42.1	U	42.1	U					Р
Selenium		T	4.4	U	4.4	U					Р
Silver		T	-0.8	В	-0.6	В					Р
Sodium			-320.5	В	-331.0	В					P
Thallium		T	2.6	U	2.6	U					Р
Vanadium		T	2.9	В	3.0	В					Р
Zinc			-9.6	В	-9.4	В					Р
Cyanide		T								T	AS

MS/MSD RECOVERY

Lab Nam∋:	PROJ AAH GCAL		Contract:					
Lab Cod∈:	LA024	Case No.:	SAS No.:		SDG No.:			
Matrix Spike	e - EPA Sample No:	SKGW611008						

SAMPLE NO. : 20311131124

COMPOUND	UNITS	SPIKE ADDED	SAMPLE CONCENTRATION	MS CONCENTRATION	MS % REC	#	QC.	LIMITS
Aluminum	ug/L	2000	1080	3310	111		75	- 125
Antimony	ug/L	100	3.7	105	105		75	- 125
Arsenic	ug/L	40	3.7	50.5	117		75	- 125
Barium	ug/L	2000	91.3	2060	98		75	- 125
Beryllium	ug/L	50	.1	52.5	105		75	- 125
Cadmiurn	ug/L	50	.2	47.2	94		75	- 125
Chromium	ug/L	200	2.1	203	101		75	- 125
Cobalt	ug/L	500	3.3	482	96		75	- 125
Copper	ug/L	250	4.2	262	103		75	- 125
Iron	ug/L	1000	8640	10300	166			
Lead	ug/L	20	1.6	22	102		75	- 125
Manganese	ug/L	500	922	1450	106		75	- 125
Mercury	ug/L	5	.1	5.8	115		75	- 125
Nickel	ug/L	500	7.6	490	96		75	- 125
Selenium	ug/L	10	4.4	5.2	52	N	75	- 125
Silver	ug/L	50	.4	50.6	101	1	75	- 125
Thallium	ug/L	50	2.6	38.4	77		75	- 125
Vanadium	ug/L	500	.8	505	101		75	- 125
Zinc	ug/L	500	13.8	508	99		75	- 125
Cyanide	ug/L	100	3	101	101		75	- 125

Column to be used to flag recovery and RPD values with an asterisk * Values outside of QC limits
RPD: 0 out of 0 outside limits
Snike Racoveny 1 out of 20 outside limits

MS/MSD RECOVERY

Lab Name:	PROJ AAH GCAL		Contract:	······································
Lab Code:	LA024	Case No.:	SAS No.:	SDG No.:
Matrix Sp ke	- EPA Sample No:	SKGW611008 (DISS)		

SAMPLE NO. : 20311131133

COMPOUND		SPIKE ADDED	SAMPLE CONCENTRATION	MS CONCENTRATION	MS % REC	#	QC.	LIMITS
Aluminum	ug/L	2000	25.8	2120	106		75	- 125
Antimon'/	ug/L	100	3.7	111	111	1	75	- 125
Arsenic	ug/L	40	7.5	49.8	106		75	- 125
Barium	ug/L	2000	83.3	2090	100		75	- 125
Beryllium	ug/L	50	.1	53.1	106	—	75	- 125
Cadmiurn	ug/L	50	.2	47.3	95		75	- 125
Chromium	ug/L	200	.8	206	103		75	- 125
Cobalt	ug/L	500	2	491	98		75	- 125
Copper	ug/L	250	1.2	262	105		75	- 125
Iron	ug/L	1000	5100	6000	89			_
Lead	ug/L	20	1.5	18.8	94		75	- 125
Mangan⊛se	ug/L	500	866	1400	107		75	- 125
Mercury	ug/L	5	.1	5.1	101		75	- 125
Nickel	ug/L	500	4	492	98		75	- 125
Selenium	ug/L	10	4.4	4.4	0	N	75	- 125
Silver	ug/L	50	.4	51.7	103		75	- 125
Thallium	ug/L	50	2.6	36.8	74	N	75	- 125
Vanadiu n	ug/L	500	.8	521	104		75	- 125
Zinc	ug/L	500	4.8	506	100		75	- 125

Column to be used to flag recovery and RPD values with an asterisk
* Values outside of QC limits

RPD: 0 out of 0 outside limits

Spike Recovery: 2 out of 19 outside limits

EPA SAMPLE NO. 5B

		POST DIGE	EST SPIKE SAMPLE RECOVERY	SKGW611008PDS	
Lab Name:	PROJ AAH GCAL	····			
Lab Code:	LA024	Case No.:	Contract:		
Matrix: (ःsoil	/water) Water	· · · · · · · · · · · · · · · · · · ·	SAS No.:	SDG No.:	
% Solids for	Sample:		Level: (low / med)		

Concentration Units (ug/L or mg/kg dry weight): ug/L

Analyte	Control Limit %R	Spiked Sample Result (SSR)	С	Sample Result (SR)	С	Spike Added (SA)	% R	Q	М
Aluminum		2800	T	25.8	U		0	Ī	Р
Antimony		120	1	3.7	Ū	120	100		Р
Arsenic		27.6		3.7	В	20	119		P
Barium		97.2	В	.3	U		0		P
Beryl ium		9.8	T	.1	U	10	98		Р
Cadniium		8.8		.2	U	10	88		P
Calcium		191000	T	7.5	U		0	T	P
Chromium		21.5	1	2.1	В	20	97		Р
Cobalt		92.5	T	3.3	В	100	89		Р
Copper		51.7	1	4.2	В	50	95		Р
Iron		9170	\top	14.1	U		0		Р
Lead		7	7	1.6	В	6	90		Р
Magnesium		37700	T	36.7	U		0		Р
Manganese		957	T	922	1	30	118		Р
Nickel		78	T	7.6	В	80	88		Р
Potassium		10200	7	42.1	U		0		Р
Selenium		4.4	U	4.4	U	10	0		Р
Silver		17.9	1	.4	lυ	20	89		P
Sodium	1	27800	1	45.4	Ū		0	T -	Р
Thallium		14.1	1	2.6	U	20	70		Р
Vanadium		94	\top	.8	U	100	94	1	Р
Zinc		49	+	13.8	ĺВ	40	88	 	P

Comments:

1641 10

5B

POST DIGEST SPIKE SAMPLE RECOVERY

EPA SAMPLE NO.
SKGW611008 (DISS)PDS

Lab Name: PROJ AAH GCAL	
Lab Code: LA024 Case No.:	Contract:
Matrix: (:soil / water) Water	SAS No.: SDG No.:
% Solids for Sample:	Level: (low / med)

Concentration Units (ug/L or mg/kg dry weight): ug/L

Analyte	Control Limit %R	Spiked Sample Result (SSR)	С	Sample Result (SR)	С	Spike Added (SA)	% R	Q	М
Aluminum		25.8	U	25.8	Ţυ		0	\vdash	P
Antiniony		121	1	3.7	U	120	101		Р
Arsenic		26.2		7.5	В	20	93	1	Р
Barium		84.2	В	.3	Īυ		0		Р
Beryllium		9.6		.1	U	10	96	T	Р
Cadraium		8.1	1	.2	Ū	10	81		Р
Calcium		192000	1	7.5	Ū		0		Р
Chromium		19.1		.8	Ū	20	96		Р
Coba It		91.8	1	2	В	100	90	T	Р
Copper		48.8	\top	1.2	U	50	98	1	Р
Iron		5130	7	14.1	Ū		0		Р
Lead		5.2		1.5	Ū	6	87		Р
Magnesium		35900	1	36.7	Ū		0		Р
Manganese		906	\top	866	\top	30	135		Р
Nickel		73.9	1	4	В	80	87		Р
Potassium		10100	1	42.1	Ū		0		Р
Selenium		4.4	U	4.4	U	10	0		Р
Silve -		18.3	1	.4	U	20	92		Р
Sodium		28300		45.4	Ū		0		Р
Thall um		9	В	2.6	U	20	45		Р
Vanadium		94.6	T	.8	U	100	95		Р
Zinc		42.1	\top	4.8	В	40	93		Р

Comments:

U.S. EPA - CLP 6 DUPLICATES

FPA SAMPLE NO						
	_	~ ^	-		_	NI-

Lab Name: PROJ A	AH GCAL		
Lab Code LA024	Case No.:	Contract:	
Matrix: (soil / water)	Water	SAS No.:	SDG No.:
		Level: (low / med)	
% Solids for Sample:		% Solids for Duplicate:	

Concentration Units (ug/L or mg/kg dry weight) ug/L

	Control							Γ_
Analyte	Limit	Sample (S)	С	Duplicate (D)	С	RPD	Q	М
Aluminum	0 _ 20	1080		1310		19	不	Р
Antimon'/		3.7	Ū	3.7	U	0		Р
Arsenic	-	3.7	В	7.2	В	64		Р
Barium	_	91.3	В	97.4	В	6		Р
Beryllium	- 1	.1	U	.1	U	0		P
Cadmiurn		.2	Ü	.2	Ū	0		P
Calcium	0 . 20	190000		199000		5		Р
Chromiu n	-	2.1	В	2.3	В	9		P
Cobalt	- 1	3.3	В	3.4	В	3		Р
Copper		4.2	В	4.6	В	9		Р
Iron	0 _ 20	8640		9270		7		Р
Lead	-	1.6	В	1.8	В	12		Р
Magnesium	0 - 20	37500		39200		4		Р
Mangan∈se	0 _ 20	922		963		4		Р
Mercury	-	.1	U	.1	U	0		ΑV
Nickel	-	7.6	В	7.6	В	0		Р
Potassium	0 _ 5000	9430		10300		870		Р
Selenium	-	4.4	U	4.4	U	0		Р
Silver	-	.4	U	.4	U	0		P
Sodium	0 _ 20	27700		27000		3		P
Thallium	-	2.6	U	2.6	Ū	0		Р
Vanadium	- 1 - 1	.8	Ū	.8	U	0		P
Zinc	- 1	13.8	В	11.9	В	15		Р
Cyanide	<u> </u>	3	U	3	Ū	0	1	AS

10/2/05

U.S. EPA - CLP 6 DUPLICATES

EPA SAMPLE NO

Lab Name: PROJ AA	AH GCAL		L
Lab Code: LA024	Case No.:	Contract:	
Matrix: (soil / water)	Water	SAS No.:	SDG No.:
		Level: (low / med)	
% Solids for Sample:		% Solids for Duplicate:	

Concentration Units (ug/L or mg/kg dry weight) ug/L

19 No 1900

* · 0F

Analyte	Control Limit	Sample (S)	С	Duplicate (D)	С	RPD	Q	М
Aluminu n		25.8	Tü	25.8	ΙŪ	0	 " -	P
Antimony		3.7	U	3.7	10	0	₩	P
Arsenic		7.5	В	4.1	В	593.	 	P
Barium		83.3	B	82.5	В	1	ጕ	l ' _P
Beryllium		.1	10	.1	U	0	┢	P
Cadmiurn		.2	+ 0	.2	Ü	0	+	P
Calcium		20 191000	+	194000		2	+-	Р
Chromium		.8	Ü	.8	U	0		Р
Cobalt	-	2	В	1.9	В	5	1	Р
Copper	-	1.2	U	1.2	U	0	\top	Р
Iron	0 -	20 5100		5000		2		Р
Lead	-	1.5	υ	1.5	υ	0		P
Magnesium	0 _	20 35700		37200		4		Р
Manganese	0 -	20 866		902		4		P
Mercury	-	.1	U	.1	Ū	0		A۱
Nickel	-	4	В	3.9	В	3		P
Potassium	0 - 50	00 10100		10400		300		P
Selenium	-	4.4	U	4.4	U	Ó		P
Silver		.4	U	.4	U	0	1	Р
Sodium	0 .	20 28300		27600		3	T	P
Thallium	-	2.6	U	2.6	U	0	1	Р
Vanadium		.8	U	.8	U	0	1	P
Zinc	-	4.8	В	1.5	В	195	1	P

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LABORATORY CONTROL SAMPLE

Lab Name:	PROJ AAH	GCAL	Contract:	Contract:				
Lab Ccde: _l	LA024	Case No.:	SAS No.:	SDG No.:				
Solid LCS So	ource:		·					
Aqueous LCS	S Source:	106-40-1 ~310006 HIGH F	PURITY~323					

	Aq	ueous (ug/	L)		Solid (n	ng/kg)	
Analyte	True	Found	% R	True	Found	С	% R
Aluminum	2000	2000	100		T		T
Antimony	500	525	105				
Arsenic	2000	2070	103				
Barium	2000	1970	98				
Beryllium	50.0	52.6	105				
Cadmium	50.0	48.9	98				
Calcium	10000	9920	99				
Chromium	200	201	100				
Cobalt	500	490	98				
Copper	250	255	102				
Iron	1000	1040	104				
Lead	500	498	100				
Magnesium	10000	10200	102				
Manganese	500	503	101				
Nickel	500	496	99				1
Potassium	10000	9940	99				1
Selenium	2000	2060	103				
Silver	50.0	50.1	100				
Sodium	10000	9650	96				1
Thallium	2000	2000	100				
Vanadium	500	503	101				
Zinc	500	478	96				

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LABORATORY CONTROL SAMPLE

Lab Name:	PROJ AAH GCAL		Contract:				
Lab Code:	LA024	Case No.:	SAS No.:		SDG No.:		
Solid LCS S	Source:						
Aqueous I C	S Source: 10	06-40-1 ~310006 HIGH PURITY~32	3				

	Aq	ueous (ug/	L)		Solid (m	g/kg)	
Analy:e	True	Found	% R	True	Found	С	% R
Aluminum	2000	2010	100				<u> </u>
Antimony	500	521	104				
Arsenic	2000	2040	102				
Barium	2000	1990	100				
Beryllium	50.0	52.6	105				
Cadm um	50.0	48.6	97				T
Calcium	10000	10000	100				
Chromium	200	202	101				
Coball	500	490	98				
Copp∈r	250	255	102				
Iron	1000	1030	103				T
Lead	500	497	99				
Magnesium	10000	10100	101				
Manganese	500	510	102				
Nickel	500	494	99				
Potassium	10000	9960	100				
Selenium	2000	2040	102				
Silver	50.0	50.5	101				
Sodium	10000	9860	99				T
Thallium	2000	2010	100				
Vanac ium	500	515	103				
Zinc	500	485	97	1			

FORM VII-IN

EPA		

			ICP SERIAL	DILUTIONS	SKGW611008	SD
Lab Name:	PROJ AAH G	CAL	·		_	
Lab Code	LA024	Case No.		Contract:		
Matrix: (soil	/water) Wa	ter		SAS No.:	 SDG No.:	
				Level: (low / med)		

Concentration Units:

house of

ug/L

Analyte	Initial Sample Result (I)	С	Serial Dilution Result (S)	С	% Difference	Q	М
Aluminum	1080		1320		22.2	7	Р
Antimon;/	37.0	U	18.5	U		7	Р
Arsenic	3.7	В	14.5	Ū	292		Р
Barium	91.3	В	97.5	В	6.8		P
Beryllium	1.0	U	0.5	U			Р
Cadmium	2.0	U	1.0	U			Р
Calcium	190000		198000	Т	4.2		Р
Chromium	2.1	В	4.0	U	90.5		Р
Cobalt	3.3	В	3.1	В	6.1		Р
Copper	4.2	В	6.0	U	42.9		Р
Iron	8640		9220		6.7		Р
Lead	1.6	В	7.5	Ü	369		Р
Magnesium	37500		40800	T	8.8		Р
Manganese	922		972		5.4		Р
Nickel	7.6	В	6.2	В	18.4	E	P
Potassium	9430		9470	В	.4	Γ	P
Selenium	44.0	U	22.0	U	1		Р
Silver	4.0	Ü	2.0	U			Р
Sodium	27700		26600	T	4	Γ	Р
Thallium	26.0	Ű	13.0	U		Γ	Р
Vanadium	8.0	Ū	4.0	Ū			P
Zinc	13.8	В	3.0	Ū	78.3	1	Р

ICP SERIAL DILUTIONS

EPA SAMPLE NO.
SKGW611008 (DISS)SD

Lab Name: PROJ	AAH GUAL		
Lab Code: LA024	Case No.	Contract:	
Matrix: (soil / water)	Water	SAS No.:	SDG No.:
		Level: (low / med)	

Concentration Units: ug/L

mo.	ug/i

						r	
Analyte	Initial Sample Result (I)	С	Serial Dilution Result (S)	С	% Difference	Q	м
Aluminum	258	U	129	U			Р
Antimony	37.0	U	18.5	U			Р
Arsenic	7.5	В	14.5	U	93.3		Р
Barium	83.3	В	80.8	В	3		Р
Beryllium	1.0	U	0.5	Ü			Р
Cadmiuri	2.0	U	1.0	U			Р
Calcium	191000		192000		.5		Р
Chromiu n	8.0	U	4.0	U			Р
Cobalt	2.0	В	2.3	В	15		Р
Соррег	12.0	U	6.0	U			P
Iron	5100		5090	1	.2		Р
Lead	15.0	υ	7.5	U			Р
Magnesium	35700		36400		2		Р
Manganese	866		864		.2		Р
Nickel	4.0	В	4.2	В	5		Р
Potassium	10100		9760	В	3.4		Р
Selenium	44.0	U	22.0	Ū			Р
Silver	4.0	U	2.0	U			Р
Sodium	28300		26200		7.4		Р
Thallium	26.0	U	13.0	U			Р
Vanadiurn	8.0	U	11.3	В		Ì	Ρ
Zinc	4.8	В	3.0	U	37.5		P

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INSTRUMENT DETECTION LIMITS (QUARTERLY)

Lab Name:	PROJ AAH GCAL	······································		
Lab Code:	LA024	Case No.:	SAS No.:	SDG No.:
Instrument I	D: ICP5		Study Date: 04/30/03	

	Wavelength		CRDL	IDL	
Analyte	(nm)	Background	(ug/L)	(ug/L)	М
Aluminum	308.210		200	25.8	Р
Antimony	206.830		60	3.7	P
Arsenic	193.700		10	2.9	Р
Barium	233.520		200	.3	Р
Beryllium	313.100		5	.1	P
Cadmium	214.430		5	.2	Р
Calcium	315.880		5000	7.5	Р
Chromium	267.710		10	.8	Р
Cobalt	228.610		50	.4	Р
Copper	324.750		25	1.2	Р
Iron	259.940		100	14.1	Р
Lead	220.350		3	1.5	Р
Magnesium	279.080		5000	36.7	Р
Mançianese	257.610		15	.2	Р
Nickel	231.600		40	.7	Р
Potassium	766.480		5000	42.1	P
Selenium	196.030		5	4.4	Р
Silve ·	328.060		10	.4	Р
Sodium	589.580		5000	45.4	Р
Thallium	190.800		10	2.6	Р
Vanadium	290.880		50	.8	Р
Zinc	213.860		20	.6	Р

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14 ANALYSIS RUN LOG

Lab Name:	PROJ AAI	H GCAL	Contract:	
Lab Code:	LA024	Case No.:	SAS No.:	SDG No.:
Instrument I	D Number:	ICP5	Method Type: P	
Start Date:	11/21/03		End Date: 11/21/03	

Analyte Symbols

			, analyte cymuns																								
EPA Sample No.	D/F	Time	% R	Ai	Sb	As	Ва	Ве	Cd	Са	Cr	Со	Си	Fe	Pb	Mg	Mn	Hg	Ni	ĸ	Se	Ag	Na	TI	٧	Zn	Cn
ICV	1	1041		\	Х	X		X	Х	X	Х	X	X	Х	X	X	Х		X		Х	Х		X	X	X	
ICV2	1	1048		X			Х													X			Х				
ICB	1	1055		X	Х	X	Х	Х	Х	Х	Х	Х	Х	Х	X	X	Х		X	X	Χ	Х	Х	Х	Х	Х	
CRDL	1	1101		Γ	X	Х		Х	X		Х	X	Х		X		X		X		Х	Χ		Х	Х	X	
ICSA	1	1108		X	Х	Х	X	Х	X	Х	Х	X	Х	Х	X	Х	Х		Х	X	Х	Х	Х	Х	Х	Х	
ICSAB	1	1114		X	X	X	Х	X	Х	Х	Х	Х	Х	Х	X	Х	X		Х	X	Х	Х	X	Х	X	Х	
ccv	1	1120		X		Х	Х	Х	Х	Х	Х	Х	X	Х	X	X	Х		Х	X	Х	Х	Х	Х	X	Х	
CCV2	1	1127			Х																						
CCB	1	1134		X	Х	Х	Х	Х	Х	X	Х	Х	X	Х	X	Х	X		Х	X	Х	Х	Х	Х	X	X	
MB130846	1	1141		X	Х	Х	Х	Х	Х	Х	Х	Х	Х	Х	X	Х	Х		Х	X	Х	Х	Х	Х	X	X	
SKGW611008	1	1148		X	Х	Х	X	Х	Х	X	Х	Х	Х	Х	X	X	X		Х	Х	Х	Х	Χ	Х	Х	X	
SKGW611008 DUP	1	1155		X	Х	Х	Х	X	Х	Х	Х	Х	Х	Х	X	Х	Х		Х	X	Х	Х	Х	X	X	X	
SKGW611008SD	5	1202	-	X	Х	Х	Х	Х	X	Х	X	Х	Х	Х	X	Х	X		Х	X	Х	Х	Х	X	X	X	
SKGW611008PDS	1	1208		X	X	Х	Х	Х	Х	Х	X	X	X	X	X	X	Х		X	X	Х	Х	Х	Х	Х	X	
SKGW611008 MS	1	1215		X	Х	Х	Х	Х	Х	X	Х	Х	Х	X	X	X	Х		Х	X	Х	Х	Х	Х	X	X	
LCS130847	1	1222		X	Х	Х	X	Х	X	X	Х	Х	Х	Х	X	X	Х		Х	Х	Х	Х	Х	Х	X	X	
SKGW261008	1	1236		X	X	Х	Х	Χ	Х	X	Х	Х	Х	Х	X	Х	Х		Х	X	Х	Х	Х	Х	Х	X	
SKGW301008	1	1243		X	Х	X	Х	Х	X	Х	Х	Х	Х	Х	X	Х	Х		X	X	Χ	Х	Х	Х	X	X	\Box
CCV	1	1311		X		Х	Х	Х	Х	Х	X	Х	Х	X	Х	Х	Х		Х	X	Х	Х	Х	X	X	X	П
CCV2	1	1318			X											Г											\Box
ССВ	1	1325		X	Х	Х	Х	Х	X	Х	Х	Х	Х	X	X	Х	Х		Х	X	Х	Х	Х	Х	X	Х	
SKGW631008	1	1331		X	Х	Х	Х	Х	Х	Х	X	X	Х	Х	X	Х	Х		Х	X	Х	Х	Х	Х	X	X	\Box
SKGW241008	1	1338		X	Х	Х	Χ	X	Х	Х	Х	X	Х	Х	X	Х	Х		X	X	Х	Χ	Χ	Х	X	X	
SKGW07R1008	1	1345		X	Х	Х	Х	Х	Х	X	Х	Х	Х	X	Х	Х	X		Х	X	Х	Х	Х	Х	X	X	
SKGW06R1008	1	1352		X	Х	Х	X	X	X	Х	Х	Х	Х	Х	X	Х	Х		Х	X	Х	Х	Х	Х	X	Х	
SKGW591008	1	1359		X	Х	Х	Х	Х	X	X	Х	Х	Х	Х	X	Х	Х		Х	X	Х	Х	Х	X	X	X	\Box
SKGW601008	1	1406		X	Х	Х	X	Х	Х	X	Х	X	Х	Х	X	Х	Х		Х	X	Χ	Х	X	X	X	X	\Box

U.S. EPA - CLP 14 ANALYSIS RUN LOG

Lab Name:	PROJ AAI	1 GCAL	Contract:	
Lab Code:	LA024	Case No.:	SAS No.: , SDG No.:	
Instrument I	D Number:	ICP5	Method Type: P	
Start Date:	11/21/03		End Date: 11/21/03	

Analyte Symbols

			Analyte Offinions																								
EPA Sample No.	D/F	Time	% R	ΑI	Sb	As	Ва	Ве	Cd	Са	Cr	Со	Cu	Fe	Pb	Mg	Mn	Hg	Ni	Κ	Se	Ag	Na	TI	٧	Zn	Cn
SKGW62A1008	1	1413		X	X	Х	Х	X	X	X	X	X	Х	Х	Х	X	X		Х	X	Х	Х	X	X	X	X	
CRDL	1	1419			Х	Х		X	Х		Х	X	Х		Х		X		Х		Х	Х		Х	X	X	
ICSA	1	1426		X	Х	Х	Х	Х	Х	Х	X	X	Х	Х	X	X	X		Х	X	X	X	Х	Χ	X	X	
ICSAB	1	1432		X	X	X	X	Х	X	X	X	X	X	X	Х	X	Х		Х	Х	Х	Х	Х	Х	Х	X	
CCV	1	1438		X		X	X	X	Х	Х	X	X	Х	Х	Х	X	Х		Х	Х	Х	Х	Х	Х	X	X	
CCV2	1	1445			X																						
ССВ	1	1451		X	X	X	Х	X	X	X	X	X	Х	X	X	X	X		Х	X	Х	Х	Х	X	X	X	
SKGW641008	1	1458		X	Х	X	Х	Х	Х	X	X	X	Х	X	X	X	X		Х	X	Х	X	Х	Х	X	X	
SKGW581008	1	1505		X	Х	Х	Х	Х	Х	X	Х	X	Х	Х	Х	X	Х		Х	Х	Х	X	Х	Х	Х	Х	
SKGW58FD1008	1	1511		X	X	X	X	Х	X	X	X	X	Х	X	Х	X	Х		Х	Х	Х	Х	Х	Х	X	X	
SKGWFB1008	1	1518		X	Х	Х	X	Х	Х	Х	X	X	Х	X	X	X	Х		Х	X	Х	Х	Х	Х	X	Х	
MB130849	1	1525		X	X	X	Х	Х	Х	Х	Х	Х	X	X	X	X	Х		Х	X	Х	Х	Х	Х	Х	Х	
SKGW611008 (DISS)	1	1532		X	X	Х	Х	Х	Х	X	Х	X	X	Х	Х	X	Х		Х	X	Х	Х	Х	Х	Х	X	
SKGW611008 DUP (DISS)	1	1538		X	Х	Х	X	X	Х	X	Х	X	Х	Х	Х	X	Х		Х	X	Х	Х	Х	Х	Х	X	
SKGW611008 (DISS)PDS	1	1545		X	Х	Х	Х	Х	Х	Х	X	X	Х	Х	Х	X	Х		Х	Х	Х	Х	Х	Χ	X	Х	
SKGW611008 MS (DISS)	1	1552	\	X	X	X	X	Х	X	X	X	X	X	X	Х	X	X		X	Х	Х	Х	Х	X	X	X	
LCS130850	1	1559		X	Х	X	Х	Х	Х	X	X	X	X	Х	Х	X	Х		Х	Х	X	Х	Х	Х	X	X	
ccv	1	1605		X		X	Х	X	Х	X	Х	X	Х	Х	Х	X	Х		X	Х	Х	Х	Х	Х	X	X	
CCV2	1	1612			X																						
ССВ	1	1619		X	Х	X	Х	X	Х	X	X	X	X	Х	Х	X	Х		Х	Х	Х	Х	Х	X	X	X	
SKGW611008 (DISS)SD	5	1626		X	Х	Х	X	Х	Х	Х	Х	X	Х	Х	Х	X	Х		Х	Х	Х	Χ	Х	Х	X	X	
SKGW261008 (DISS)	1	1632		X	X	Х	Х	Х	Х	Х	Х	X	Х	Х	X	X	Х		Х	X	Х	Χ	Х	Х	X	X	
SKGW301008 (DISS)	1	1639		X	X	Х	X	Х	Х	Х	Х	X	X	Х	Х	X	Х		Х	Х	Х	Х	Х	X	X	X	
SKGW631008 (DISS)	1	1646		X	Х	Х	Х	X	Х	Х	X	X	Х	Х	Х	X	Х		Х	Х	Χ	Х	Х	Х	Х	Х	
SKGW241008 (DISS)	1	1653		X	X	X	Х	X	Х	Х	Х	X	X	Х	X	X	X		Х	Х	Χ	Х	Х	X	X	X	
SKGW07R1008 (DISS)	1	1700		X	Х	Х	Х	Х	Х	Х	Х	X	Х	Х	X	X	Х		Х	Х	X	Х	Х	Х	Х	Х	
SKGW06R1008 (DISS)	1	1707		X	X	Х	X	X	Х	X	Х	Х	Х	Х	Х	X	Х		Х	X	Х	Х	Х	X	X	X	

U.S. EPA - CLP 14 ANALYSIS RUN LOG

Lab Name: PROJ AAH GCAL	Contract:	
Lab Code: LA024 Case	No.: SAS No.:	SDG No.:
Instrument ID Number: ICP5	Method Type	e: <u>P</u>
Start Date: 11/21/03	End Date:	11/21/03

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Analyte Symbols	
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				Analyte Symbols																							
EPA Sample No.	D/F	Time	% R	ΑI	Sb	As	Ва	Ве	Cd	Са	Cr	Со	Cu	Fe	Pb	Mg	Mn	Hg	Ni	K	Se	Ag	Na	TI	٧	Zn	Cn
CRDL	1	1721			Х	Х		Х	Χ		X	Х	Х		Х		X		Х		Х	X		X	X	Х	
ICSA	1	1728		Х	X	Х	Х	Х	Х	Х	Х	Х	Х	X	Х	Х	Х		Х	Х	Х	Х	Х	Х	Х	X	
ICSAB	1	1734		X	Х	Х	Х	Х	Х	Х	Х	X	Х	X	Х	X	Х		Х	Х	Χ	X	Х	Х	Х	X	
CCV	1	1739		X		Х	Х	Х	Х	Х	Х	Х	Х	Х	Х	Х	Х		Х	Х	Χ	X	Х	Х	Х	Х	
CCV2	1	1746			X																						\Box
ССВ	1	1753		Х	Х	Х	Х	Х	Х	Х	Х	Х	Х	Х	Х	Х	X		Х	Х	Х	Х	Х	Х	Х	Х	
SKGW591008 (DISS)	1	1800		X	Х	Х	Х	Χ	Х	Х	Х	Х	Х	Х	Х	Х	Х		Х	Х	Χ	Χ	Х	Х	Х	Х	
SKGW601008 (DISS)	1	1807		X	Х	Х	Х	Х	Х	Х	Х	Х	Х	Х	Х	X	Х		Х	Х	Х	Х	Χ	Х	Х	Х	
SKGW62A1008 (DISS)	1	1814		Х	Х	Х	Х	Х	Χ	Х	Х	Х	Х	Х	Х	X	Х		Х	Х	Х	Х	Х	Х	Х	Х	
SKGW641008 (DISS)	1	1821		Х	Х	Х	Х	Х	Χ	Х	Х	Х	Х	X	Х	X	Х		Х	Х	Х	Х	Х	Х	Х	Х	
SKGW581008 (DISS)	1	1828		Х	Х	X	Х	Х	Х	Х	Х	Х	Х	Х	Х	X	Х		Х	X	Χ	Х	Х	X	Χ	Х	
SKGW58FD1008 (DISS)	1	1834		X	Х	Х	Х	Х	Х	Х	Х	X	Х	X	X	X	Х		Х	Х	Х	Х	Х	Х	Х	Х	
SKGWFB1008 (DISS)	1	1841		Х	Х	Х	X	Х	Х	Х	X	X	Х	Х	Х	Х	X		X	Х	Х	X	Х	Х	Х	Х	
7777777777777777777777	1	1848				-																			\Box		
777777777777777777777777777777777777777	1	1855																									
777777777777777777777777777777777777777	1	1901																									
CCV	1	1908		X		X	Х	Х	Х	Х	Х	X	X	Х	Х	Х	Х		Х	Х	Х	Х	Х	Х	Х	X	
CCV2	1	1915			Х																				П		
ССВ	1	1922		X	Х	Х	Х	Х	Х	Х	Х	Х	Х	Х	X	X	Х		X	Х	X	Х	Х	Χ	Х	Х	
777777777777777777777777777777777777777	1	1929											\Box												\Box	\Box	
777777777777777777777777777777777777777	1	1936																									
277777777777777777777777777777777777777	1	1943									-																
777777777777777777777777777777777777777	5	1950																									
777777777777777777777777777777777777777	1	1957																									
777777777777777777777777777777777777777	1	2004												<u> </u>											П		
777777777777777777777777777777777777777	1	2011	<u> </u>																								П
CRDL	1	2024			Х	Х		Х	Х		Х	Х	Х		Х		Х		Х		Х	X		Х	Х	Х	

i ah Name	PROJ AAH GCAL	Contract:
ran Haille.		Contract.

Lap name.	PROJ AAN GCAL	Contract:	

 Lab Code:
 LA024
 Case No.:
 SAS No.:
 SDG No.:

Instrument ID Number: ICP5 Method Type: P

Start Date: 11/21/03 End Date: 11/21/03

															· · · · · · · · · · · · · · · · · · ·			_								_	
														An	alyte	Syr	nbol	s									
EPA Sample No.	D/F	Time	% R	ΑI	Sb	As	Ва	Ве	Cd	Са	Cr	Со	Cu	Fe	Pb	Mg	Mn	Hg	Ni	K	Se	Ag	Na	TI	٧	Zn	Cn
ICSA	1	2031		Х	Х	Х	Х	Х	X	Х	X	Х	Х	Х	X	Х	X		X	X	X	X	X	X	X	X	
ICSAB	1	2037		X	Х	Х	Х	Х	X	Х	Х	Х	Х	Х	Х	Х	Х		Х	X	Χ	Х	Х	Х	Х	Х	
CCV	1	2043		Х		Х	X	X	Х	X	X	Х	Х	Х	Х	Х	Х		Х	Х	Х	X	X	Х	Х	X	
CCV2	1	2049			Х																						
ССВ	1	2056		X	Х	Х	Х	X	Х	X	X	Х	Х	X	X	X	Х		Х	Х	Χ	Х	Χ	Х	Х	X	
777777777777777777777777777777777777777	1	2103																				П					
777777777777777777777	1	2110																									
777777777777777777777	1	2117																									
777777777777777777777777777777777777777	5	2124																									
777777777777777777777	1	2131																									
777777777777777777777777777777777777777	1	2137			П															Γ							
727777777777777777777777777777777777777	1	2144					_															П			\Box		
2217777777777777777777	1	2151																				\Box					
777777777777777777777777777777777777777	1	2158																_					•				
777777777777777777777777777777777777777	1	2205																									
CRDL	1	2212			Х	Х		Х	Х		Х	Х	Х		Х		Х		Х		Х	Х		Х	Х	X	
ICSA	1	2218		Х	Х	Х	Х	Х	X	Х	X	Х	X	X	Х	Х	Х		Х	Х	Х	Х	Х	Х	Х	X	abla
ICSAB	1	2224		X	X	Χ	Х	Х	Х	Х	X	X	Х	Х	Х	X	Х		Х	X	Х	X	Х	Х	Х	X	
ccv	1	2230		X		Х	X	Х	Х	Х	X	Х	Х	X	Х	Х	Х		Х	X	Х	X	X	Х	Х	X	
CCV2	1	2237			Х			_									П					\sqcap					
ССВ	1	2244		Х	X	Х	Х	Х	Х	Х	X	X	Х	X	Х	Х	X		Х	X	Х	X	Χ	Х	X	х	



ANALYTICAL RESULTS

PERFORMED BY

GULF COAST ANALYTICAL LABORATORIES, INC.

Report Date 12/30/2003

GCAL Report 203121507

ADDENDUM

Deliver To Earth Tech 200 Vine Street Wilder, KY 41076

859-442-2300

Attn Pat Higgins

Customer Earth Tech

Project Skinner Landfill

CASE NARRATIVE

Client: Earth Tech Report: 203121507

Gulf Coast Analytical Laboratories received and analyzed the sample(s) listed on the sample cross-reference page of this report. Receipt of the sample(s) is documented by the attached chain of custody. This applies only to the sample(s) listed in this report. No sample integrity or quality control exceptions were identified unless noted below.

The ILM04.1 – CLP analysis is resubmitted as an addendum to include an expanded list of compounds at the request of the client. The Addendum includes an updated case narrative.

VOLATILES MASS SPECTROMETRY

In the OLC02.1 - CLP Volatiles analysis, sample 20312150703 (SKSWD52FB1008) had to be diluted due to compounds that were detected above the linear range of the calibration.

SEMI-VOLATILES GAS CHROMATOGRAPHY

In the analysis of RESC01 on column-2, there was no resolution between Methoxychlor and Endosulfan Sulfate. There was no target analysis present in the associated samples. All peaks resolved on the primary column.

METALS

Copper, Iron, and Zinc is flagged as estimated for samples associated with prep batch 266831 due to the fact that the percent difference between the original sample result and the serial dilution result is greater than ten. A chemical or physical interference is suspected.

In the ILM04.1 – CLP analysis the Sample/Duplicate RPD for Cobalt for prep batch 266831 is not applicable because the sample and/or duplicate concentration is less than five times the reporting limit.

In the Mercury analysis for prep batch 266832, the MS recovery was outside the control limits. The LCS recovery was within the control limits. This indicates the analysis is in control and the sample is affected by matrix interference.

MISCELLANEOUS

Sample 20312150705 (SKSWD521008 (DISSOLVED)) had to be preserved at the laboratory with Nitric Acid.

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EPA SAMPLE NO.

INORGANIC	ANALYSIS	DATA	SHEET
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SKSWD5/21008	
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Lab Name: P	ROJ AAH GCAL	Contra	ıct:				
Lab Code: LA	.024 Case No.: _	SAS N	lo.:		SDG No.:		
Matrix: (soil / w	vater) <u>Water</u>	Lab Sam	ple ID:	20312150701			
Level: (low / m	ed)	Date Re	ceived:	12/13/03			
% Solids:							
	Units (ug/L or mg/kg dry weigl	nt) : ug/L					
CAS No.	Analyte	Concentration	С		Q	M	}
7429-90-5	Aluminum	177	В			Р	
744(-36-0	Antimony	3.7	U			Р	
744()-38-2	Arsenic	2.9	U			Р	
744(1-39-3	Barium	37.0	В			Р	
744(1-41-7	Beryllium	0.1	Ū			P	
744(1-43-9	Cadmium	0.2	U			Р	
744(1-70-2	Calcium	121000				Р	
744()-47-3	Chromium	1.0	В			Р	İ
744()-48-4	Cobalt	0.4	U			Р	į
744()-50-8	Copper	14.8	В			Р	1
7439-89-6	Iron	155				Р	1
7439-92-1	Lead	1.5	U			Р	1
7439-95-4	Magnesium	26600				Р	
7439-96-5	Manganese	16.5				Р	1
7439-97-6	Mercury	0.1	Ū		N	AV	us
744()-02-0	Nickel	0.7	U			Р	1
744(1-09-7	Potassium	3560	В			Р	ĺ
7782:-49-2	Selenium	4.4	U			Р	1
744(-22-4	Silver	0.4	υ			Р	1
744(-23-5	Sodium	10300				Р	1
744(-28-0	Thallium	2.6	U			Р	
744(-62-2	Vanadium	0.8	U			Р	
744(-66-6	Zinc	32.6				Р	17
57-12-5	Cyanide	3.0	U			AS	[
						10	listos ma-
Color Before:	COLORLESS	Clarity Before: C	LEAR	-	Texture:		

Artifacts:

Comments:

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Color After:

COLORLESS

CLEAR

Clarity After:

1

EPA SAMPLE NO.

SKSWD52DUP1008
Δž

		07
Lab Name: PROJ AAH GCAL	Contract:	
Lab Code: LA024 Case No.:	SAS No.:	SDG No.:
Matrix: (soil / water) Water	Lab Sample ID: 20312150702	
Level: (low / med)	Date Received: 12/13/03	
% Solids:		

Concentration Units (ug/L or mg/kg dry weight): ug/L

CAS No.	Analyte	Concentration	С	Q	M]
7429-90-5	Aluminum	173	В		Р	1
744)-36-0	Antimony	3.7	U	***	Р	1
7440-38-2	Arsenic	2.9	U		Р	1
7440-39-3	Barium	37.4	В		P	1
7440-41-7	Beryllium	0.1	U		Р	1
7440-43-9	Cadmium	0.2	U		Р	1
7440-70-2	Calcium	125000		-	Р	1
7440-47-3	Chromium	1.1	В		Р	1
7440-48-4	Cobalt	0.4	U		Р	1
7440-50-8	Copper	10.3	В		Р	1
7439-89-6	Iron	211			P	1
7439-92-1	Lead	1.5	U	U		1
7439-95-4	Magnesium	27900			P	1
7439-96-5	Manganese	17.5			Р	1
7439-97-6	Mercury	0.1	U	N	AV	่ีนํ
7440-02-0	Nickel	0.7	U		Р	1
7440-09-7	Potassium	3680	В		Р	1
7782-49-2	Selenium	4.4	U		Р	1
7440-22-4	Silver	0.4	U		P	1
7440-23-5	Sodium	10600			P	1
744)-28-0	Thallium	2.6	U		P	1
7440-62-2	Vanadium	0.8	U	· · · · · · · · · · · · · · · · · · ·	P	1
7440-66-6	Zinc	35.7				15
57-12-5	Cyanide	3.0	U		AS	┐~

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Color Before:	COLORLESS	Clarity Before:	CLEAR	Texture:	***************************************
Color After:	COLORLESS	Clarity After:	CLEAR	Artifacts:	
Comments:					

FORM I - IN

EPA SAMPLE NO. INORGANIC ANALYSIS DATA SHEET

_		
	SKSWD521008	(DISSOLVE
	۸	

	Contract	٥٦
Lab Name: PROJ AAH GCAL	Contract:	
Lab Code: LA024 Case No.:	SAS No.:	SDG No.:
Matrix: (soil / water) Water	Lab Sample ID: 20312150705	-
Level: (low / med)	Date Received: 12/13/03	
% Splids:		

ug/L Concentration Units (ug/L or mg/kg dry weight):

CAS No.	Analyte	Concentration	С	Q	М	
7429-90-5	Aluminum	98.7	В		Р	1
7440-36-0	Antimony	3.7	U		Р	7
744(-38-2	Arsenic	2.9	U		Р	7
744(-39-3	Barium	40.1	В		P	1
744(-41-7	Beryllium	0.1	U		P	7
744(-43-9	Cadmium	0.2	U		Р	7
744(1-70-2	Calcium	130000		· · · · · · · · · · · · · · · · · · ·	Р	٦
744(1-47-3	Chromium	1.4	В		P	1
744()-48-4	Cobalt	0.4	U		Р	٦
744(1-50-8	Copper	10.4	В		P	7
7439-89-6	Iron	59.0	В		Р	٦
7439-92-1	Lead	1.5	U		Р	٦
7439-95-4	Magnesium	28500			Р	7
7439-96-5	Manganese	10.9	В		Р	7
7439-97-6	Mercury	0.1	U	N	AV	1
744()-02-0	Nickel	0.7	U		P	٦
744()-09-7	Potassium	3870	В		Р	٦
7782-49-2	Selenium	4.4	U		Р	7
7440-22-4	Silver	0.4	U		Р	1
744()-23-5	Sodium	11100			Р	٦.
744()-28-0	Thallium	2.6	U		Р	7
744()-62-2	Vanadium	2.2	В		Р	1
744()-66-6	Zinc	91.6			Р	٦

Color Before:	COLORLESS	Clarity Before:	CLEAR	Texture:	
Color After:	COLORLESS	Clarity After:	CLEAR	Artifacts:	
Cornments:					

FORM I - IN

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EPA SAMPLE NO.

INORGANIC ANALYSIS DATA SHEET

SKSWD**52**DUP1008 (DISS

Lab Name: Pf	ROJ AAH GCAL	Con	tract:			·			
Lab Code: LA	024 Case No.:	SAS	S No.:		SDG No.:				
Matrix: (soil / water) Water Lab Sample ID: 20312150706									
Level: (low / me	ed)		Received:				-		
% Solids:									
Cor centration Units (ug/L or mg/kg dry weight): ug/L									
CAS No.	Analyte	Concentration	С		Q	М]		
7429-90-5	Aluminum	69.7	В			P			
7440-36-0	Antimony	3.7	U			Р			
7440-38-2	Arsenic	2.9	U			Р	1		
7440-39-3	Barium	37.4	В			Р			
7440-41-7	Beryllium	0.1	Ü			Р			
7440-43-9	Cadmium	0.2	Ū			Р	1		
7440-70-2	Calcium	128000	T			Р			
7440-47-3	Chromium	0.9	В			Р	1		
7440-48-4	Cobalt	0.4	U	<u> </u>		Р	1		
7440-50-8	Copper	7.8	В			Р	1		
7439-89-6	Iron	46.1	В			Р	1		
7439-92-1	Lead	1.5	U			P	1		
7439-95-4	Magnesium	27800				Р	1		
7439-96-5	Manganese	10.1	В	1		Р	1 _		
7439-97-6	Mercury	0.1	U		N	AV	143		
7440-02-0	Nickel	0.7	U			Р	1		
7440-09-7	Potassium	3840	В			Р	1		
7782-49-2	Selenium	4.4	Ū			Р	1		
7440-22-4	Silver	0.4	U			Р	1		
7440-23-5	Sodium	11000				Р			
7440-28-0	Thallium	2.6	U			Р			
7440-62-2	Vanadium	0.8	Ü			Р			
7440-66-6	Zinc	33.9				P] [
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Color Before:	COLORLESS	Clarity Before:	CLEAR		Texture:		- managanangan		
Color After:	COLORLESS	Clarity After:	CLEAR		Artifacts:				

FORM I - IN

Comments:

Lab Name:	GCAL		Contract:	
Lab Code:	LA024	Case No.:	SAS No.:	SDG No.: 203121507
Calibration	Source:	106-41-2 CPI	Instrument ID: ICP5	ICAL ID: 2
			Date Analyzed: 12/19/03	Time: 1013

Analyte	True	Found	CAL %R	Units	Method	Туре
Antimony	120	125	104	ug/L	ILM04.1 - CLP Metals	Р
Arsenic	20.0	20.2	101	ug/L	ILM04.1 - CLP Metals	Р
Beryll um	10.0	9.70	97	ug/L	ILM04.1 - CLP Metals	Р
Cadmium	10.0	9.60	96	ug/L	ILM04.1 - CLP Metals	Р
Chronium	20.0	20.1	101	ug/L	ILM04.1 - CLP Metals	Р
Cobalt	100	98.3	98	ug/L	ILM04.1 - CLP Metals	Р
Copper	50.0	46.6	93	ug/L	ILM04.1 - CLP Metals	Р
Lead	6.00	7.00	117	ug/L	ILM04.1 - CLP Metals	Р
Mang anese	30.0	30.4	101	ug/L	ILM04.1 - CLP Metals	Р
Nicke	80.0	79.9	100	ug/L	ILM04.1 - CLP Metals	Р
Selenium	10.0	12.8	128)	ug/L	ILM04.1 - CLP Metals	Р
Silver	20.0	19.5	97	ug/L	ILM04.1 - CLP Metals	Р
Thallium	20.0	21.2	106	ug/L	ILM04.1 - CLP Metals	Р
Vanadium	100	101	101	ug/L	ILM04.1 - CLP Metals	Р
Zinc	40.0	31.3	A8	ug/L	ILM04.1 - CLP Metals	P

Lab Name:	GCAL		Contract:		
Lab Code:	LA024	Case No.:	SAS No.:	SDG No.: 203121507	
Calibration S	Source:	106-41-2 CPI	Instrument ID: ICP5	ICAL ID: 2	
			Date Analyzed: 12/19/03	Time: 1201	

Analyte	True	Found	CAL %R	Units	Method	Туре
Antimony	120	122	102	ug/L	ILM04.1 - CLP Metals	Р
Arsenic	20.0	18.6	93	ug/L	ILM04.1 - CLP Metals	Р
Beryllium	10.0	9.50	95	ug/L	ILM04.1 - CLP Metals	Р
Cadmium	10.0	9.40	94	ug/L	ILM04.1 - CLP Metals	Р
Chrom um	20.0	19.8	99	ug/L	ILM04.1 - CLP Metals	Р
Cobalt	100	97.4	97	ug/L	ILM04.1 - CLP Metals	Р
Сорреі	50.0	46.4	93	ug/L	ILM04.1 - CLP Metals	Ρ
Lead	6.00	6.90	114	ug/L	ILM04.1 - CLP Metals	Р
Manganese	30.0	30.3	101	ug/L	ILM04.1 - CLP Metals	Р
Nickel	80.0	79.6	99	ug/L	ILM04.1 - CLP Metals	Р
Selenium	10.0	8.40	84	ug/L	ILM04.1 - CLP Metals	P
Silver	20.0	19.8	99	ug/L	ILM04.1 - CLP Metals	Р
Thallium	20.0	21.9	110	ug/L	ILM04.1 - CLP Metals	Р
Vanadium	100	99.9	100	ug/L	ILM04.1 - CLP Metals	Р
Zinc	40.0	29.4	737	ug/L	ILM04.1 - CLP Metals	Р

Lab Name:	GCAL		Contract:		
Lab Code:	LA024	Case No.:	SAS No.:	SDG No.: 203121507	
Calibration	Source:	106-44-8 EXAXOL	Instrument ID: FIMS1	ICAL ID: 1	_
			Date Analyzed: 12/30/03	Time: 1255	

Analyte	True	Found	CAL %R	Units	Method	Type	
Mercury	0.200	0.200	77	ug/L	ILM04.1 CLP HG	AV	

Lab Name:	PROJ AAH GCAL		Contract:	 	
Lab Ccde:	LA024	Case No.:	SAS No.:	 SDG No.:	

Preparation Blank Matrix: (soil / water) Water

Preparation Blank Concentration Units: (ug/L / mg/kg) ug/L

	Initial								Prepa	-	
	Calib.		Conti	nuing	Calibrat	ion Bl	ank (ug/	_)	ration		
Analyte	Blank		İ				, -		Blank		
Analyte	(ug/L)	С	1	С	2	С	3	С		С	М
Aluminum	44.6	В	25.8	Ū	25.8	U	<u> </u>	1	25.800	U	P
Antimony	3.7	U	4.1	В	3.9	В			3.700	U	Р
Arsenic	2.9	U	2.9	U	2.9	U		l	2.900	υ	Р
Barium	0.3	U	0.3	U	0.3	U			0.300	U	Р
Berylli ım	0.1	Ū	0.1	U	0.1	U		T	0.100	U	P
Cadmium	0.4	В	1.7	В	1.8	В			0.639	В	P
Calcium	7.5	Ū	12.9	В	16.9	В			17.791	В	Р
Chromium	0.8	Ü	0.8	υ	0.8	U			0.800	U	Р
Coball	0.4	U	0.4	U	0.6	В			0.400	U	Р
Copper	7.3	В	10.6	В	6.3	В			15.864	В	Р
Iron	14.1	U	14.1	U	14.1	Ū			14.100	Ū	Р
Lead	1.5	U	1.5	U	1.5	U			1.500	U	Р
Magnesium	36.7	U	46.7	В	43.1	В			-61.778	В	Р
Manganese	-0.3	В	-0.3	В	-0.5	В			0.321	В	Р
Mercury	0.1	U	0.1	U	0.1	U			0.100	U	AV
Nickel	0.7	Īυ	0.7	U	0.7	Ū			0.700	U	Р
Potassium	42.1	U	42.1	U	42.1	U			42.100	U	Р
Selenium	4.4	U	4.4	U	4.4	Ū			4.400	U	Р
Silver	0.4	U	-0.7	В	-0.9	В			-1.318	В	P
Sodium	-65.8	В	-97.5	В	-167.3	В			-48.226	В	Р
Thallit m	2.6	U	2.6	U	2.9	В			2.600	U	P
Vanacium	2.1	В	2.1	В	1.7	В			0.800	U	Р
Zinc	-0.9	В	0.7	В	-3.1	В	ļ -		14.391	В	Р
Cyanide	3.0	U	3.0	Τυ	3.0	lυ			3.000	lυ	AS

MS/MSD RECOVERY

Lab Name:	PROJ AAH GCAL		Contract:				
Lab Code:	LA024	Case No.:	SAS No.:		SDG No.:		
Matrix Snike	- EDA Sample No:	SKS/MD521008					

AMPLENO.: 136171								
COMPOUND	UNITS	SPIKE ADDED	SAMPLE CONCENTRATION	MS CONCENTRATION	MS % REC	#	QC.	LIMITS
Aluminum	ug/L	2000	177	2480	115		75	- 125
Antimony	ug/L	100	3.7	107	107		75	- 125
Arsenic	ug/L	40	2.9	43.6	109	7	75	- 125
Barium	ug/L	2000	37	2120	104	1	75	- 125
Beryllium	ug/L	50	.1	55.1	110		75	- 125
Cadmium	ug/L	50	.2	49.4	99		75	- 125
Chromium	ug/L	200	1	211	105		75	- 125
Cobalt	ug/L	500	.4	495	99	7	75	- 125
Copper	ug/L	250	14.8	274	104		75	- 125
Iron	ug/L	1000	155	1330	117		75	- 125
Lead	ug/L	20	1.5	21.1	105		75	- 125
Mangan∋se	ug/L	500	16.5	556	108		75	- 125
Nickel	ug/L	500	.7	501	100		75	- 125
Selenium	ug/L	10	4.4	8.6	86	1	75	- 125
Silver	ug/L	50	.4	53.5	107	1	75	- 125
Thallium	ug/L	50	2.6	48.3	97		75	- 125
Vanadiurn	ug/L	500	.8	538	108	1	75	- 125
Zinc	ug/L	500	32.6	517	97	1	75	- 125

Column to be used to flag recovery and RPD values with an asterisk
* Values outside of QC limits

RPD:	0	out of	0	out	side lim	its
Spike Re	ecove	ry:	0	out of	18	outside limits

5B

POST DIGEST SPIKE SAMPLE RECOVERY

ı	SKSWD521008PDS	

Lab Code: LA024	Case No.:	Contract:		
Matrix: (soil / water)	Water	SAS No.:	SDG No.:	
% Solids for Sample:		Level:	(low / med)	

Concentration Units (ug/L or mg/kg dry weight): ug/L

Analyte	Control Limit %R	Spiked Sample Result (SSR)	С	Sample Result (SR)	С	Spike Added (SA)	% R	Q	М
Alu minum		234	-	25.8	U		0	1	Р
Antimony		123	1	3.7	U	120	103		Р
Arsenic		14		2.9	U	20	70		Р
Barium		36.4	В	.3	U		0		Р
Beryllium		10.1		.1	Ū	10	101		Р
Cadmium		8.9		.2	Ü	10	89		Р
Calcium		121000		7.5	Ū		0		Р
Chromium		20.5		1	В	20	97		P
Cobalt		92.8	\top	.4	Ū	100	93		Р
Copper		59.2		14.8	В	50	89		Р
Iron		150	1	14.1	U		0		Р
Lead		5.7		1.5	Ū	6	96	İ	Р
Magnesium		26600		36.7	Ú		0	1	Р
Manganese		46.8	1	16.5		30	101	İ	Р
Nickel		72.8	1	.7	U	80	91		Р
Po:assium		3640	В	42.1	Ū		0		Р
Se enium		5	1	4.4	Ū	10	50		Р
Silver		19.1	┪	.4	Ū	20	96		Р
Sotium		10300	1	45.4	Ū		0	 	Р
Thallium		15	1	2.6	U	20	75	$\overline{}$	P
Vanadium	- 	101	†	.8	U	100	101		P
Zinc		61.4	T	32.6	1	40	72		Р

Comments:

Lab Name: PROJ AAH GCAL

U.S. EPA - CLP 6 DUPLICATES

EPA	C A	MEDI	=	NIC
EPA	SA	ואורו	_=	IN.

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σ	577	D52	100	വെവ	_

Lab Name: PROJ	AAH GCAL		
Lab Code: LA024	Case No.:	Contract:	
Matrix: (soil / water) Water	SAS No.:	SDG No.:
		Level: (low / med)	TOTAL UNIQUE MATERIAL CONTRACTOR OF THE PROPERTY OF THE PROPER
% Solids for Sample	•	% Solids for Duplicate:	

Concentration Units (ug/L or mg/kg dry weight) ug/L

	Control							
Analyie	Limit	Sample (S)	С	Duplicate (D)	С	RPD	Q	М
Aluminum	-	177	В	187	В	5		Р
Antimony	-	3.7	U	3.7	U	0		Р
Arsenic		2.9	٦	2.9	Ü	0		Р
Barium	-	37	В	37.8	В	2		Р
Beryllium	-	.1	U	.1	U	0		Р
Cadmium	-	.2	٦	.2	U	0		Р
Calcium	0 _ 20	121000		120000		.8		Р
Chromium	-	1	В	1.1	В	10		Р
Cobalt	-	.4	U	.4	U	0		Р
Coppe ⁻	-	14.8	В	12.8	В	14	1	Р
iron	0 _ 100	155		161		6		Р
Lead	-	1.5	U	1.5	U	0		Р
Magnesium	0 _ 20	26600		27000		1		Р
Manganese	0 _ 15	16.5		17		.5		Р
Mercury	-	.1	U	.1	U	0		AV
Nickel	-	.7	U	.7	U	0		Р
Potassium	-	3560	В	3510	В	1		Р
Selenium	-	4.4	U	4.4	U	0		Р
Silver	-	.4	υ	.4	υ	0	1	Р
Sodium	0 . 5000	10300		10100		200		Р
Thallium	_	2.6	U	2.6	U	0	1	Р
Vanadium	-	.8	U	.8	U	0		Р
Zinc	0 _ 20	32.6		25.4		7.2		Р

U.S. EPA - CLP

LABORATORY CONTROL SAMPLE

Lab Name: PROJ AAH	GCAL	Contract:	Contract:			
Lab Code: LA024	Case No.:	SAS No.:	SDG No.:			
Solid LCS Source:						
Aqueous LCS Source:	106-40-1 ~310006 HIGH PURIT	ΓY~323				

	Aq	ueous (ug/	L)	Solid (mg/kg)			
Analyte	True	Found	% R	True	Found	С	% R
Aluminum	2000	2150	108	1			7
Antimony	500	563	113				
Arsenic	2000	2230	112				
Barium	2000	2080	104				
Bery llium	50.0	55.6	111				
Cadmium	50.0	51.8	104				
Calcium	10000	11100	111				
Chromium	200	210	105				
Cobalt	500	513	103				
Copper	250	279	111				
Iron	1000	1060	106				
Lead	500	533	107				
Magnesium	10000	10700	107				
Manganese	500	536	107				
Nickel	500	525	105				
Potassium	10000	11800	118				
Selenium	2000	2180	109				
Silver	50.0	53.4	107				
Socium	10000	11300	113				
Thallium	2000	2130	106				
Variadium	500	536	107				
Zino	500	514	103				1

U.S. EPA - CLP

ICP SERIAL DILUTIONS

EPA SAMPLE N

SKSWD521008SD	

Lab Name:	PROJ AAH GCAL				
Lab Code:	LA024	Case No.	Contract:		
Matrix: (soil	/water) Water		SAS No.:	S	SDG No.:

Level: (low / med)

Concentration Units:

ug/L

Analyte	Initial Sample Result (I)	С	Serial Dilution Result (S)	С	% Difference	Q	м
Aluminum	177	В	129	Ū	27.1		Р
Antimony	3.7	U	18.5	U			Р
Arsenic	2.9	U	14.5	U			Р
Bariurn	37.0	В	37.1	В	.3		P
Beryll um	0.1	U	0.5	Ū			Р
Cadmium	0.2	υ	1.0	U		1	P
Calcium	121000		125000		3.3		Р
Chrornium	1.0	В	4.0	U	300		Р
Coba t	0.4	U	2.0	U			Р
Copper	14.8	В	6.0	U	59.5	Æ	Р
Iron	155		93.1	В	39.9	Z	Р
Lead	1.5	U	7.5	U			Р
Magresium	26600		28600		7.5	\Box	Р
Manganese	16.5		15.3	В	7.3		Р
Nicke-I	0.7	U	3.5	U			Р
Potassium	3560	В	3650	В	2.5		P
Selenium	4.4	U	22.0	U			P
Silve -	0.4	U	2.0	U			Р
Sodium	10300		9660	В	6.2		Р
Thall um	2.6	U	13.0	U			Р
Vanadium	0.8	υ	8.3	В			Р
Zinc	32.6		3.0	U	90.8	E	Р

U.S. EPA - CLP

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ICP SERIAL DILUTIONS

EPA	CΔ	MADI	F	Ni
	ur.	MAIL F		11

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SKSWD5210	

Lab Name:	PROJ AA	H GCAL			
Lab Cod∋:	LA024	Case No.	Contract:		
Matrix: (soil	/water)	Water	SAS No.:	SDG No.:	
			Level: (low / med)		

Concentration Units:

ug/L

Analyte	Initial Sample Result (I)	С	Serial Dilution Result (S)	С	% Difference	Q	м
Alumirium	177	В	129	U	27.1		Р
Antimony	37.0	U	18.5	U			Р
Arsenic	29.0	υ	14.5	U			Р
Barium	37.0	В	37.1	В	.3		Р
Beryllium	1.0	υ	0.5	U			Р
Cadm um	2.0	U	1.0	U			Р
Calcium	121000		125000		3.3		P
Chronium	1.0	В	4.0	U	300		Р
Cobal:	4.0	U	2.0	U			Р
Copper	14.8	В	6.0	U	59.5	Z	Р
Iron	155		93.1	В	39.9	F	P
Lead	15.0	U	7.5	U		Ĭ –	P
Magnesium	26600		28600	1	7.5		Р
Manganese	16.5		15.3	В	7.3		Р
Nicke	7.0	U	3.5	U			P
Potassium	3560	В	3650	В	2.5		Р
Selenium	44.0	U	22.0	U		1	Р
Silver	4.0	Ū	2.0	U			Р
Sodium	10300		9660	В	6.2		Р
Thallium	26.0	Ū	13.0	U			P
Vanadium	8.0	U	8.3	В			P
Zinc	32.6		3.0	Ιυ	90.8	E	P

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U.S. EPA - CLP

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INSTRUMENT DETECTION LIMITS (QUARTERLY)

Lat Name:	PROJ AAH GCAL					
Lat Code:	LA024	Case No.:	SAS No.:		SDG No.:	
Instrument I	D: ICP5		Study Date:	04/30/03		

	Wavelength		CRDL	IDL	
Analyte (nm) Backgi			(ug/L)	(ug/L)	М
Aluminum	308.210		200	25.8	Р
Antimony	206.830		60	3.7	Р
Arsenic	193.700		10	2.9	Р
Barium	233.520		200	.3	Р
Beryllium	313.100		5	.1	Р
Cadmium	214.430		5	.2	Р
Calcium	315.880		5000	7.5	Р
Chromium	267.710		10	.8	Р
Cobalt	228.610		50	.4	Р
Copper	324.750		25	1.2	Р
Iron	259.940		100	14.1	Р
Lead	220.350		3	1.5	Р
Magnesium	279.080		5000	36.7	Р
Manganese	257.610		15	.2	Р
Nickel	231.600		40	.7	Р
Polassium	766.480		5000	42.1	Р
Selenium	196.030		5	4.4	Р
Silver	328.060		10	.4	Р
Sodium	589.580		5000	45.4	Р
Thallium	190.800	<u>† </u>	10	2.6	Р
Vanadium	290.880		50	.8	Р
Zino	213.860		20	.6	Р

000294 RESUBMITTED

U.S. EPA - CLP 14 ANALYSIS RUN LOG

Lab Name: PROJ AAH GCAL	Contract:
Lab Code: I A024 Case No.:	SAS No.: SDG No.:
Instrument ID Number: ICP5	Method Type: P
Start Date: 12/19/03	End Date: 12/19/03

Analyte Symbols

EPA Sample No.	D/F	Time	% R	Ai	Sb	As	Ва	Ве	Cd	Ca	Cr	Со	Cu	Fe	Pb	Mg	Mn	Hg	Ni	K	Se	Ag	Na	TI	V	Zn	Cn
ICV	1	0953		Π	Х	X		Х			Х	X	X		X	X	Х		Χ		X	X		X	X	X	
ICV2	1	1000		X			Х						<u> </u>		_					Х			Х			$\overline{}$	
ICB	1	1007		X	Х	X	X	X	Х	Х	Х	X	Х	Х	X	Х	Х		Х	Х	Х	X	X	X	X	X	
CRDL	1	1013			X	X		Х	Х		Х	X	X		X		X		Χ		X	X		X	X	X	
ICSA	1	1020		X	Х	Х	X	Х	X	X	Х	X	X	Х	Х	X	Х		X	Х	Х	X	X	X	X	X	
ICSAB	1	1026		X	X	Х	X	Х	X	X	Х	X	X	X	X	X	X		Х	Х	X	X	Х	X	X	X	
ccv	1	1032		X		X	X	Х	X	Χ	Х	Х	X	Х	X	X	Х		Χ	X	Χ	X	X	X	X	Х	
CCV2	1	1039			X																						
ССВ	1	1046		X	X	X	X	X	X	X	X	X	X	Х	Х	X	Х		Х	Х	Х	X	X	Х	X	X	
MB136168	1	1053		X	X	X	X	Х	Х	Х	Х	Х	Х	X	Х	X	Х		Χ	Х	Χ	Х	X	X	X	X	
SKSWD521008	1	1100		X	X	X	Х	Х	X	Х	Х	X	X	X	X	Х	Х		X	Χ	Х	X	X	X	Х	X	
SKSWD521008DUP	1	1107		X	Х	X	Х	Х	Х	Х	Х	X	Х	Х	Х	Х	Х		Х	Х	X	Х	Х	X	X	Х	
SKSWD521008SD	5	1113		X	Х	Х	Х	Х	X	X	Х	Х	Х	X	X	X	Х		Х	Х	Х	Х	X	X	Х	X	
SKSWD52DUP1008	1	1120		X	X	Х	Х	Х	Х	Х	Х	Х	Х	Х	Х	X	X		X	X	X	Х	Х	Х	Х	X	
SKSWD521008 (DISSOLVED)	1	1127		X	Χ	Х	X	Х	Х	Х	Х	X	Х	X	X	X	Х		Х	Х	X	Х	X	X	X	X	
SKSWD52DUP1008 (DISSOL	1	1134		X	Х	X	Х	Х	Х	X	X	Х	X	Х	X	X	Х		X	X	X	Х	X	X	X	X	
LCS136169	1	1141		Х	Х	Х	X	Х	Х	X	X	Х	X	Х	Х	Х	Х		Х	Х	X	Х	Х	Х	Х	X	
SKSWD521008MS	1	1148		X	Х	Х	X	Х	X	Х	X	X	Х	X	X	X	Х		X	Х	Х	X	Х	Х	X	X	
SKSWD521008PDS	1	1155		X	Х	X	X	Х	Х	X	Х	X	Х	X	Х	X	Х		X	Х	X	X	Х	Х	Х	X	
CRDL	1	1201			X	Х		Х	X		X	X	X		X		Х		Х		Х	Х		Х	X	X	
ICSA	1	1208		X	X	Х	Х	Х	X	X	Х	Х	Х	X	X	X	Х		Х	Х	Χ	X	X	X	X	Х	
ICSAB	1	1214		X	X	Х	Х	Χ	Х	X	Х	Х	Х	Х	Х	X	Х		Х	X	X	X	Х	X	X	X	
CCV	1	1220		Х		X	Х	Χ	X	X	X	X	Х	X	X	X	X		X	X	X	Х	X	Х	Х	X	
CCV2	1	1227			X																						
ССВ	1	1234		X	Х	Х	X	Х	Х	Х	Х	Х	Х	Х	X	X	Х		Х	X	Х	Х	Х	X	X	X	

DATA VALIDATION REPORT

FOR

SKINNER LANDFILL SITE

EARTH TECH: PROJECT NUMBER 38335

LABORATORY REPORT NUMBER 203111413

PROJECT MANAGER: Ron Rolker

Date: January 15, 2004

Revised Report Dated: October 6, 2005

Data Validator: Mark Kromis

1146.60

APPENDIX C LIST OF ACRONYMS

BFB Bromofluorobenzene CC Continuing Calibration

The Road

CCV Continuing Calibration Verification
CCB Continuing Calibration Blanks
CLP Contract Laboratory Program
CRDL Contract Required Detection Limit
DFTPP Decafluorotriphenylphosphine

GC/MS Gas Chromatograph/Mass Spectrometer

IC Initial Calibration

IC3 Initial Calibration Blank
 IDL Instrument Detection Limit
 IC2 Inductively Coupled Plasma
 ICS Interference Check Sample
 ICV Initial Calibration Verification

ILM Inorganic Analysis Multi-Media Multi-Concentration

INDAM Individual A Mixture INDBM Individual B Mixture mg/L milligrams per liter

MS/MSD Matrix Spike/Matrix Spike Duplicate
OLC Organic Analysis Low Concentration

OLM Organic Analysis Multi-Media Multi-Concentration

%D Percent Difference

% RSD Percent Relative Standard Deviation

PB Preparation Blanks
QC Quality Control
RF Response Factor

RPD Relative Percent Difference
RRF Relative Response Factor
SDG Sample Delivery Group
SOW Statement of Work

µg/L micrograms per liter

US EPA United States Environmental Protection Agency

VOC Volatile Organic Compounds VTSR Validated Time of Sample Receipt

DATA VALIDATION SUMMARY – SAMPLE DELIVERY GROUP 203111413 INORGANICS

Validation of the inorganics data, as prepared by Gulf Coast Analytical Laboratories (GCAL) for the samples collected from the Skinner Landfill site in November 2003, was conducted by Earth Tech using the National Functional Guidelines for Inorganic Data Review, (US EPA, February, 1994), as appropriate. These data were reported by GCAL under Sample Delivery Group (SDG) 203111413

GCAL#	Sample Description
203111413-01	SKSW511008
203111413-02	SKSW511008 MS
203111413-04	SKSW511008 DUP
203111413-05	SKSWFB1008
203111413-06	SKSW521008
203111413-07	SKSW531008
203111413-08	SKSW511008 (DISS)
203111413-09	SKSW511008 MS (DISS)
203111413-10	SKSW511008 DUP (DISS)
203111413-11	SKSWFB1008 (DISS)
203111413-12	SKSW521008 (DISS)
203111413-13	SKSW531008 (DISS)

INTRODUCTION

Analyses of metals were performed according to Contract Laboratory Program (CLP)-Inorganic Analysis Multi-media Multi-concentration ILM04.1 Statement of Work (SOW). Results of the sample analyses are reported by the laboratory as either qualified or unqualified. Unqualified results mean that the reported values maybe used without reservation. Various qualifier codes are used by the laboratory to denote specific information regarding the analytical results.

The data validation process is intended to evaluate the data on a technical basis. The data package also was subjected to an internal laboratory quality review prior to submission to Earth Tech for data validation.

During the validation process, laboratory-qualified and unqualified data are verified against all available supporting documentation. Based on this evaluation, qualifier codes may be added, deleted or modified by the data user. Final results are therefore, either qualified or unqualified. Validator-qualified results are annotated with the following codes in accordance with the Functional Guidelines:

U The constituent was analyzed for, but was not detected above the level of the associated analytical reporting limit. The associated value is either the sample quantitation limit or the sample detection limit.

- J The analyte was positively identified; the associated numerical value is the approximate concentration of the analyte in the sample.
- UI The analyte was not detected above the reported sample quantitation limit. However, the reported quantitation limit is approximate and may or may not represent the actual limit of quantitation necessary to accurately and precisely measure the analyte in the sample.
- R The sample results are rejected due to serious deficiencies in the ability to analyze the sample and meet quality control criteria. The presence or absence of the analyte cannot be verified.

Details of the inorganics data validation findings and conclusions are provided in the following sections of this report:

- 1. Holding Times
- 2. Calibration
 - A. Initial Calibration (IC)
 - B. Continuing Calibration (CC)
- 3. Blanks
- 4. Inductively Coupled Plasma (ICP) Interference Check Sample
- 5. Laboratory Control Sample (LCS)
- 6. Duplicate Analysis
- 7. Spike Sample Analysis
- 8. ICP Serial Dilution
- 9. System Performance
- 10. Documentation
- 11. Overall Assessment

1. HOLDING TIMES

All samples for inorganics analyses were analyzed within the 180-day holding time for preserved aqueous samples. Mercury analyses were conducted within the 28-day holding time for aqueous samples undergoing CLP protocol. Cyanide analyses were conducted within the 14-day holding time. The cooler temperature upon receipt at the laboratory was within the recommended temperature of 4°C +/- 2°C.

2. CALIBRATION

A. Initial Calibration

The percent recoveries for the Initial Calibration Verification (ICV) standard were within Quality Control (QC) limits for all constituents.

B. Continuing Calibration

The percent recoveries for the Continuing Calibration Verification (CCV) standard were within QC limits for all constituents.

3. BLANKS

The Initial Calibration Blank (ICB), Continuing Calibration Blanks (CCB) and Preparation Blanks (PB) were analyzed at the appropriate frequencies. No constituents were detected in the ICB, CCB, and PB blanks above the corresponding Contract Required Detection Limit (CRDL).

4. ICP INTERFERENCE CHECK SAMPLE

Results for the ICP analysis of the Interference Check Sample (ICS) solution AB were within 20% of the true value.

5. LABORATORY CONTROL SAMPLES

Recoveries were within the control limit (80-120%) for all constituents.

6. **DUPLICATE ANALYSIS**

The Relative Percent Difference (RPD) between the sample and duplicate results were within the acceptance criteria for all target compounds.

7. SPIKE SAMPLE ANALYSIS

.....

The laboratory used sample SKSW511008 and SKSW511008 (Dissolved) for the matrix spike sample. The MS percent recoveries were within the acceptance criteria (75%-125%) in the total and dissolved fractions with the exception of Selenium (0%).

As per the National Functional Guidelines: if the percent recovery is less than 10% then qualify detected results for that analyte with "J" and non-detected results with "R".

8. ICP SERIAL DILUTION

As noted in the National Functional Guidelines: If the analyte concentration is at least 50 times above the IDL, its serial dilution analysis must then agree within 10% of the original determination after corrected for dilution. The serial dilution is performed to determine whether any significant chemical or physical interference's exist due to matrix effects. The percent differences were within the acceptance criteria for all target analytes in the total and dissolved fractions.

9. SYSTEM PERFORMANCE

The analytical system appears to have been working well at the time of these analyses, based on the evaluation of the raw data.

10. DOCUMENTATION

GCAL qualified the dissolved metal results for Zinc with (*) on the Form 1's to indicate that the RPD between the original results and its duplicate result exceeded the control limit. The RPD was actually within the control limit therefore the data validator crossed out the (*) with a single line and dated and initialed the bottom of the report.

GCAL qualified the total and dissolved metal results for Manganese with an "E" qualifier on the Form 1's to indicate that the %Difference (%D) between the original results and its serial dilution result exceeded the control limit. The %Differences were actually within the control limit therefore the data validator crossed out the (E) with a single line and dated and initialed the bottom of the report.

11. OVERALL ASSESSMENT

Calcium and Vanadium were detected in the Field Blank analyzed for total metals at a concentration of 14.1 (B) ppb and 2.9 (B) ppb respectively. Barium, Calcium, Copper, and Vanadium were detected in the Field Blank (Dissolved) at a concentration of 0.3 (B) ppb, 58.4 (B) ppb, 1.6 (B) ppb, and 2.4 (B) ppb respectively. It should be noted that the laboratory supplied the water used for the Field Blank. The results that are greater than the IDL but less than the CRDL are flagged with a ("B") qualifier by the laboratory.

The percent recoveries for Zinc in the Contract Required Detection Limit (CRDL) standards were 70%, 70%, 70%, and 71%.

The percent recoveries for Selenium in the Contract Required Detection Limit (CRDL) standards were 86%, 118%, 110%, 139%, and 164%. The Selenium results were previously qualified under Section 7-titled "Spike Sample Analysis".

If the CRDL is greater than 120% then detected results greater than the IDL but less than two times the CRDL are qualified as estimated with "J". If the CRDL is below 80% then detected results are qualified as estimated with "J" and the non-detected results were qualified with "UJ".

The results are acceptable with the validator-added qualifiers.

DATA VALIDATION SUMMARY – SAMPLE DELIVERY GROUP 203111413 SEMIVOLATILE ORGANICS

Validation of the Gas Chromatograph/Mass Spectrometer (GC/MS) semi-volatile organics data, as prepared by Gulf Coast Analytical Laboratories (GCAL) for the samples collected from the Sk:nner Landfill site in November 2003, was conducted by Earth Tech using the National Functional Guidelines for Organic Data Review, (US EPA, October, 1999) as appropriate. These data were reported by GCAL under SDG 203111413.

GCAL#	Sample Description
203111413-01	SKSW511008
203111413-02	SKSW511008 MS
203111413-03	SKSW511008 MSD
203111413-05	SKSWFB1008
203111413-06	SKSW521008
203111413-07	SKSW531008

INTRODUCTION

Analyses were performed according to CLP-Organic Analysis Multi-Media, Multi-Concentration OLM04.2 SOW. Results of the sample analyses are reported by the laboratory as either qualified or unqualified. Unqualified results mean that the reported values may be used without reservation. Various data qualifier codes are used by the laboratory to denote specific information regarding the analytical results. The data validation process is intended to evaluate the data on a technical basis. The data package also was subjected to an internal laboratory quality review prior to submission to Earth Tech for data validation.

During the validation process, laboratory-qualified and unqualified data are verified against all available supporting documentation. Based on this evaluation, qualifier codes may be added, deleted or modified by the data user. Final results are therefore, either qualified or unqualified. Validator-qualified results are annotated with the following codes in accordance with the Functional Guidelines:

- U The constituent was analyzed for, but was not detected above the level of the associated analytical reporting limit. The associated value is either the sample quantitation limit or the sample detection limit.
- J The analyte was positively identified; the associated numerical value is the approximate concentration of the analyte in the sample.
- UJ The analyte was not detected above the reported sample quantitation limit. However, the reported quantitation limit is approximate and may or may not represent the actual limit of quantitation necessary to accurately and precisely measure the analyte in the sample.

R The sample results are rejected due to serious deficiencies in the ability to analyze the sample and meet quality control criteria. The presence or absence of the analyte cannot be verified.

Details of the semivolatile data validation findings and conclusions are provided in the following sections of this report:

- 1. Holding Times
- 2. GC/MS Tuning
- 3. Calibration
 - A. IC
 - B. CC
- 4. Blanks
- 5. System Monitoring Compound Recovery
- 6. MS/MSD

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- 7. Internal Standards Performance
- 8. Compound Identification
- 9. Constituent Quantitation and Reported Detection Limits
- 10. System Performance
- 11. Documentation
- 12. Overall Assessment

1. HOLDING TIMES

All samples were initially extracted within the seven-day technical holding time and the five-day VTSR method holding time. The cooler temperature upon receipt at the laboratory was within the recommended temperature of $4^{\circ}C$ +/- $2^{\circ}C$.

2. GC/MS TUNING

The samples were analyzed on a single GC/MS system, identified as MSSV2. Two decafluorotriphenylphosphine (DFTPP) tunes were run representing the shift in which the standards and samples were analyzed. The DFTPP tunes are acceptable.

3. CALIBRATION

A. Initial Calibration

One IC dated 11/26/03 was analyzed in support of the semivolatile sample analyses. Documentation of the IC was present in the data package, and the Relative Response Factor (RRF), as well as percent % RSD values were accurately reported for all target compounds. The criteria employed for technical data review purposes are different than those used in the method. The laboratory must meet a minimum RRF of 0.01; however, for data review purposes, a RRF criterion of "greater than or equal to 0.05" is applied to all semi-volatile compounds. The RRF's and the average RRF were within the acceptance criteria specified in the method for all reported analytes with the exception of 4-Chloroaniline. As per the National Functional Guidelines, if any initial calibration RRF is less than 0.05, qualify positive results that have acceptable mass spectral identification with "J", using professional judgement, and non-detected analytes as unusable (R).

The %RSD's were within the acceptance criteria specified in the method for all target analytes with the exception of Naphthalene (30.1%), 2,4-Dinitrophenol (34.8%), Diethylphthalate (35.1%), Di-n-butylphthalate (47.4%), Di-n-octylphthalate (37.3%), and Caprolactam (35.8%). The lowest point of the calibration curve was dropped for Diethylphthalate and the %RSD was recalculated. The recalculated %RSD was 8.4%, which is within the acceptance criteria of less than 30%. Diethylphthalate results less than 50 ppb but greater than the IDL were qualified as estimated with a "J" by the data validator. The highest point of the calibration curve was dropped for Naphthalene and Caprolactam and the %RSD were recalculated. The recalculated %RSD was 28.1% and 9.0%, which are within the acceptance criteria of less than 30%. Naphthalene and Caprolactam results greater than 160 ppb were qualified as estimated with a "J" by the data validator. As per the National Functional Guidelines, if the %RSD is greater than the acceptance criteria of 30% then qualify detected results as estimated with "J".

B. Continuing Calibration

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Two CCs dated 11/26/03 and 12/1/03 were analyzed in support of the semivolatile sample analyses reported in the data submissions.

The RRF's for the CC dated 11/26/03 were within the acceptance criteria. The percent difference (%D) between the average RRF's and the CC Response Factors for the CC dated 11/26/03 were within the acceptance criteria with the exception the %D for 2,4-Dintrophenol, Dinbutylphthalate, and Di-n-octylphthalate. As per the National Functional Guidelines, if the %D exceeds the acceptance criteria qualify detected results for that analyte with "J" and non-detected results for that analyte with "UJ".

The RRF's for the CC dated 12/1/03 were within the acceptance criteria. The percent difference (%D) between the average RRF's and the CC Response Factors for the CC dated 12/1/03 were within the acceptance criteria with the exception the %D for Naphthalene, Hexachlorocyclopentadiene, 2,4-Dinitrophenol, Di-n-butylphthalate, and Di-n-octylphthalate.

As per the National Functional Guidelines, if the %D exceeds the acceptance criteria qualify detected results for that analyte with "J" and non-detected results for that analyte with "UJ".

4. BLANKS

One laboratory semivolatile method blank and one field blank were analyzed with this SDG. The results are summarized below.

Method Blank (MB 131004)

Di-n-butyl phthalate (0.731 ppb) was detected in the method blank extracted on 11/18/03. The results for Di-n-butyl phthalate less than 7.31 ppb were qualified with "U" for samples extracted with method blank 131004.

Bis (2-Ethylhexyl) phthalate (0.331 J ppb) was also detected in the method blank extracted on 11/18/03. The results for bis (2-Ethylhexyl) phthalate less than 3.31 ppb were qualified with "U" for samples extracted with method blank 131004.

Field Blank (SKSW00FB1008)

The part

The presence of Di-n-butyl phthalate and bis (2-Ethylhexyl) phthalate detected in the field blank was mitigated because Di-n-butyl phthalate and bis (2-Ethylhexyl) phthalate were detected in the associated method blank.

5. SYSTEM MONITORING COMPOUND RECOVERY

All reported semivolatile system monitoring compounds were recovered within acceptable control limits.

6. MATRIX SPIKE/MATRIX SPIKE DUPLICATE

Sample SKSW511008 was used for the matrix spike/matrix spike duplicate sample. The MS/MSD percent recoveries were within the acceptance criteria with the exception of 4-Nitrophenol in the MS and 4-Nitrophenol and 2,4-Dinitrotoluene in the MSD. The RPD between the MS and MSD were within the acceptance criteria. As per the National Functional Guidelines, no action is taken on MS/MSD data alone.

7. INTERNAL STANDARDS PERFORMANCE

Internal standard areas and retention times were within acceptable limits for the reported semivolatile sample analyses.

8. COMPOUND IDENTIFICATION

All reported semivolatile constituents were correctly identified with supporting chromatograms present in the data package.

9. CONSTITUENT QUANTITATION AND REPORTED DETECTION LIMITS

Constituent quantitations were correctly calculated and reported for semivolatile constituents.

10. SYSTEM PERFORMANCE

The analytical system appears to have been working well at the time of these analyses, based on the evaluation of the raw data submitted for review.

11. DOCUMENTATION

The documentation appeared accurate and in order.

12. OVERALL ASSESSMENT

There was low-level Di-n-butylphthalate and bis (2-Ethylhexyl) phthalate contamination associated with the extraction/analysis of the groundwater samples. It should be noted that phthalates are a common laboratory. The presence of Di-n-butylphthalate and bis (2-Ethylhexyl) phthalate was mitigated in all of the groundwater samples. The results are acceptable with the validator-added qualifiers.

DATA VALIDATION SUMMARY – SAMPLE DELIVERY GROUP 203111413 VOLATILE ORGANIC

Validation of the GC/MS volatile organics data, as prepared by Gulf Coast Analytical Laboratories (GCAL) for the samples collected from the Skinner Landfill site in November 2033, was conducted by Earth Tech using the National Functional Guidelines for Organic Data Review, (US EPA, October, 1999), as appropriate. These data were reported by GCAL under SDG 203111413.

GCAL#	Sample Description
203111413-01	SKSW511008
203111413-02	SKSW511008 MS
203111413-03	SKSW511008 MSD
203111413-05	SKSWFB1008
203111413-06	SKSW521008
203111413-07	SKSW531008

INTRODUCTION

Analyses were performed according to CLP-Organic Analysis Low Concentration OLC02.0 SOW. Results of the sample analyses are reported by the laboratory as either qualified or unqualified. Unqualified results mean that the reported values may be used without reservation. Various qualifier codes are used by the laboratory to denote specific information regarding the analytical results. The data validation process is intended to evaluate the data on a technical basis. The data package also was subjected to an internal laboratory quality review prior to submission to Earth Tech for data validation.

During the validation process, laboratory-qualified and unqualified data are verified against all available supporting documentation. Based on this evaluation, qualifier codes may be added, deleted or modified by the data user. Final results are therefore, either qualified or unqualified. Validator-qualified results are annotated with the following codes in accordance with the Functional Guidelines:

- U The constituent was analyzed for, but was not detected above the level of the associated analytical reporting limit. The associated value is either the sample quantitation limit or the sample detection limit.
- J The analyte was positively identified; the associated numerical value is the approximate concentration of the analyte in the sample.
- UJ The analyte was not detected above the reported sample quantitation limit.

However, the reported quantitation limit is approximate and may or may not represent the actual limit of quantitation necessary to accurately and precisely measure the analyte in the sample.

R The sample results are rejected due to serious deficiencies in the ability to analyze the sample and meet quality control criteria. The presence or absence of the analyte cannot be verified.

The volatiles data validation findings and conclusions are provided in the following sections of this report:

- 1. Holding Times
- 2. GC/MS Tuning
- 3. Calibration
 - A. IC
 - B. CC
- 4. Blanks
- 5. System Monitoring Compound Recovery
- 6. MS/MSD
- 7. Laboratory Control Sample
- 8. Internal Standards Performance
- 9. Compound Identification
- 10. Constituent Quantitation and Reported Detection Limits
- 11. System Performance
- 12. Documentation
- 13. Overall Assessment

1. HOLDING TIMES

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All samples for Volatile Organic Compounds (VOC) analyses were analyzed within the 14-day technical holding time and the 10-day VTSR method holding time. The cooler temperature upon receipt at the laboratory was within the recommended temperature of 4°C +/- 2°C.

2. GC/MS TUNING

All samples were analyzed on a single GC/MS system, identified as MSV2. Two bromofluorobenzene (BFB) tunes were run. The BFB tunes were acceptable.

3. CALIBRATION

A. Initial Calibration

Two ICs dated 11/17/03 and 11/18/03 were analyzed on Instrument MSV2 in support of the volatile sample analyses reported in the data submissions. Documentation of the IC standards was present in the data package, and RRF's as well as %RSD values were accurately reported. The criteria employed for technical data review purposes are different than those used in the method. The laboratory must meet a minimum RRF of 0.01; however, for data review purposes, a RRF criterion of "greater than or equal to 0.05" is applied to all volatile compounds. The %RSD's were within the acceptance criteria specified in the method for all target analytes.

The RRF's and the average RRF for the IC dated 11/17/03 were within the acceptance criteria specified in the method for all target analytes with the exception of Acetone and 2-Butanone. As per the National Functional Guidelines, if any initial calibration RRF is less than 0.05, qualify positive results that have acceptable mass spectral identification with "J", using professional judgement, and non-detected analytes as unusable (R).

The RRF's and the average RRF for the IC dated 11/18/03 were within the acceptance criteria specified in the method for all target analytes with the exception of Acetone and 2-Butanone. As per the National Functional Guidelines, if any initial calibration RRF is less than 0.05, qualify positive results that have acceptable mass spectral identification with "J", using professional judgement, and non-detected analytes as unusable (R).

B. Continuing Calibration

Two CC's dated 11/17/03 and 11/18/03 were analyzed on instrument MSV2 in support of the velatile sample analyses reported in the data submissions.

The percent difference (%D) between the average RRF's and the CC RF's were within the acceptance criteria for all target analytes. The CC RRF's were within the acceptance criteria specified in the method for all target analytes with the exception of Acetone and 2-Butanone. The Acetone and 2-Butanone results were previously qualified under section 3A above.

4. BLANKS

How

Two laboratory volatile method blanks, a storage blank, a Trip Blank, and a Field Blank were aralyzed with this SDG. The results are summarized below.

Method Blanks

11 17V2BLK01 (11/17/03)

Methylene chloride was detected at a concentration of 0.14 ppb in the method blank analyzed on 11/17/03.

1118V2BLK01 (11/18/03)

There was no target analytes detected in the method blank analyzed on 11/18/03.

Storage Blank (VHBLK01)

There was no target analytes detected in the storage blank.

Trip Blank (SKGWTB1008)

Sulfur dioxide was detected at a concentration of 311 ppb in the Trip Blank dated 11/13/03.

Field Blank (SKSWFB1008)

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Benzene (0.18 ppb), Ethylbenzene (0.063 ppb), Carbon disulfide (0.34 ppb) Methylene chloride (1.5 ppb), Toluene (0.82 ppb), and Xylenes (0.38 ppb) were detected in the Field Blank collected on 11/13/03. The Methylene chloride detected in the Field Blank collected on 11/13/03 was mitigated by the presence of Methylene chloride in the associated method blank. Sulfur dioxide was detected (as a Tentatively Identified Compound TIC) in the Field Blank at a concentration of 205 ppb.

5. SYSTEM MONITORING COMPOUND RECOVERY

All reported volatile system monitoring compounds were recovered within acceptable control limits for all samples.

6. MATRIX SPIKE/MATRIX SPIKE DUPLICATE

Sample SKSW511008 was submitted for MS/MSD analysis. The percent recoveries and RDP between the MS/MSD were within the acceptance limits. A matrix spike/matrix spike duplicate is not required when analyzing samples under the CLP SOW OLC02.0

7. LABORATORY CONTROL SAMPLE

Two LCS were analyzed in conjunction with this SDG. Recoveries were within the control limit for all constituents.

8. INTERNAL STANDARDS PERFORMANCE

Internal Standard areas and retention times were within acceptable limits for the reported volatile sample analyses.

9. COMPOUND IDENTIFICATION

All reported VOCs were correctly identified with supporting chromatograms present in the data package.

10. CONSTITUENT QUANTITATION AND REPORTED DETECTION LIMITS

Constituent quantitations were correctly calculated and reported for VOCs.

11. SYSTEM PERFORMANCE

The analytical system appears to have been working well at the time of these analyses, based on the evaluation of the raw data.

12. DOCUMENTATION

The documentation appeared accurate and in order.

13. OVERALL ASSESSMENT

The results are acceptable with the validator-added qualifiers. It should be noted that the field blank contained detectable quantities of petroleum related analytes although the constituents were not detected in any of the associated surface water samples, therefore no action was taken.

DATA VALIDATION SUMMARY - SAMPLE DELIVERY GROUP 203111413 PESTICIDES

Validation of the Gas Chromatography (GC) pesticides data, as prepared by Gulf Coast Analytical Laboratories (GCAL) for the samples collected from the Skinner Landfill site in November 2003, was conducted by Earth Tech using the National Functional Guidelines for Organic Data Review, (US EPA, October, 1999), as appropriate. These data were reported by GCAL under SDG 203111413.

GCAL#	Sample Description
203111413-01	SKSW511008
203111413-02	SKSW511008 MS
203111413-03	SKSW511008 MSD
203111413-05	SKSWFB1008
203111413-06	SKSW521008
203111413-07	SKSW531008

INTRODUCTION

Analyses were performed according to CLP-Organic Analysis Multi-Media, Multi-Concentration OLM04.2 SOW. Results of the sample analyses are reported by the laboratory as either qualified or unqualified. Unqualified results mean that the reported values may be used without reservation. Various qualifier codes are used by the laboratory to denote specific information regarding the analytical results.

The data validation process is intended to evaluate the data on a technical basis. The data package also was subjected to an internal laboratory quality review prior to submission to Earth Tech for data validation.

During the validation process, laboratory-qualified and unqualified data are verified against all available supporting documentation. Based on this evaluation, qualifier codes may be added, deleted or modified by the data user. Final results are therefore, either qualified or unqualified. Validator-qualified results are annotated with the following codes in accordance with the Functional Guidelines:

- U The constituent was analyzed for, but was not detected above the level of the associated analytical reporting limit. The associated value is either the sample quantitation limit or the sample detection limit.
- J The analyte was positively identified; the associated numerical value is the approximate concentration of the analyte in the sample.
- UJ The analyte was not detected above the reported sample quantitation limit. However, the reported quantitation limit is approximate and may or may not represent the actual limit of quantitation necessary to accurately and precisely measure the analyte in the sample.

R The sample results are rejected due to serious deficiencies in the ability to analyze the sample and meet quality control criteria. The presence or absence of the analyte cannot be verified.

Details of the pesticide data validation findings and conclusions are provided in the following sections of this report:

- 1. Holding Times
- 2. Gas Chromatograph/Electronic Capture Detector (GC/ECD) Instrument Performance Check
- 3. IC
- 4. Calibration Verification
- 5. Blanks

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- 6. Surrogate Spikes
- 7. Matrix Spike/Matrix Spike Duplicate (MS/MSD)
- 8. Pesticide Cleanup Checks
- 9. Target Compound Identification
- 10. Constituent Quantitation and Reported Detection Limits
- 11. Documentation
- 12. Overall Assessment

1. HOLDING TIMES

All samples were extracted within the seven-day technical holding time and the five-day VTSR method holding time. The cooler temperature upon receipt at the laboratory was within the recommended temperature of 4°C +/- 2°C.

2. GC/ECD INSTRUMENT PERFORMANCE CHECK

The Performance Evaluation Mixture (PEM) was analyzed at the correct frequency. Absolute retention times were within limits.

The percent resolution between adjacent peaks was within QC limits for the Pesticide Analyte Resolution Check with the exception of Endosulfan sulfate analyzed 12/01/03 on the confirmation column. The percent resolution between adjacent peaks is within QC limits for the Performance Evaluation Mixtures (PEM). The percent breakdown for both 4,4-DDT and Endrin in each PEM was less than 20.0% for both GC columns. The combined percent breakdown for 4,4-DDT and Endrin in each PEM was less than 30.0% for both GC columns.

3. INITIAL CALIBRATION

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Individual standard mixtures A and B were analyzed at the correct frequencies and concentrations. The percent resolution criterion was met for Individual standard mixtures A and B.

The Percent Relative Standard Deviation (%RSD) of the calibration factors for each of the single component pesticides was less than 20%.

The multi-component target compounds were analyzed separately on both columns at a single concentration level. Retention times were determined from a minimum of three peaks.

4. CALIBRATION VERIFICATION

Absolute retention times were within appropriate time retention windows

5. BLANKS

Cne laboratory method blank was analyzed with this SDG. The results are summarized below.

Method Blank 130964

No constituents were detected above the laboratory-reporting limit. This blank corresponds to all samples extracted on 11/18/03.

6. SURROGATE SPIKES

Decachlorobiphenyl (DCB) and tetrachloro-m-xylene (TCX) surrogate spike recoveries were within the acceptance criteria for all samples.

7. MATRIX SPIKE/MATRIX SPIKE DUPLICATE

Sample SKSW511008 was used for the matrix spike/matrix spike duplicate sample. The MS/MSD percent recoveries were within the acceptance criteria with the exception of gamma-BHC. The RPD between the MS and MSD were within the acceptance criteria. As per the National Functional Guidelines, no action is taken on MS/MSD data alone.

8. PESTICIDE CLEANUP CHECKS

Recoveries of all pesticides and surrogates were within 80-120% for the lot of Florisil cartridges utilized for pesticide cleanup.

9. TARGET COMPOUND IDENTIFICATION

All reported pesticide data were correctly identified with supporting chromatograms present in the data package.

10. CONSTITUENT QUANTITATION AND REPORTED DETECTION LIMITS

Constituent quantitations were correctly calculated and reported for pesticide constituents.

11. **DOCUMENTATION**

The documentation appeared accurate and in order.

12. OVERALL ASSESSMENT

The results are acceptable with the validator-added qualifiers.

REFERENCES

US EPA, 1994. National Functional Guidelines for Inorganic Data Review.

US EPA, 1999. National Functional Guidelines for Organic Data Review.

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DATA VALIDATION REPORT

FOR

SKINNER LANDFILL SITE

EARTH TECH: PROJECT NUMBER 38335

LABORATORY REPORT NUMBER 203121507

PROJECT MANAGER: Ron Rolker

Original Dated: February 2, 2004

Revised Report May 6, 2004

Second Revision Dated: October 10, 2005

Data Validator: Mark Kromis

APPENDIX C LIST OF ACRONYMS

EFB Bromofluorobenzene CC Continuing Calibration

CCV Continuing Calibration Verification
CCB Continuing Calibration Blanks
CLP Contract Laboratory Program
CRDL Contract Required Detection Limit
DFTPP Decafluorotriphenylphosphine

GC/MS Gas Chromatograph/Mass Spectrometer

IC Initial Calibration ICB Initial Calibration

ICBInitial Calibration BlankIDLInstrument Detection LimitICPInductively Coupled PlasmaICSInterference Check SampleICVInitial Calibration Verification

ILM Inorganic Analysis Multi-Media Multi-Concentration

INDAM Individual A Mixture INDBM Individual B Mixture mg/L milligrams per liter

MS/MSD Matrix Spike/Matrix Spike Duplicate
OLC Organic Analysis Low Concentration

OLM Organic Analysis Multi-Media Multi-Concentration

%D Percent Difference

% RSD Percent Relative Standard Deviation

PB Preparation Blanks
QC Quality Control
RF Response Factor

1 1000

RPD Relative Percent Difference
RRF Relative Response Factor
SDG Sample Delivery Group
SOW Statement of Work

µg/L micrograms per liter

US EPA United States Environmental Protection Agency

VOC Volatile Organic Compounds VTSR Validated Time of Sample Receipt

DATA VALIDATION SUMMARY – SAMPLE DELIVERY GROUP 203121507 INORGANICS

Validation of the inorganics data, as prepared by Gulf Coast Analytical Laboratories (GCAL) for the samples collected from the Skinner Landfill site in November 2003, was conducted by Earth Tech using the National Functional Guidelines for Inorganic Data Review, (US EPA, February, 1994), as appropriate. These data were reported by GCAL under Sample Delivery Group (SDG) 203121507.

GCAL#	Sample Description
203121507-01	SKSWD521008
203121507-02	SKSWD52DUP1008
203121507-05	SKSWD521008 DISS
203121507-06	SKSWD52DUP1008 DISS

INTRODUCTION

Analysis of metals were performed according to Contract Laboratory Program (CLP)-Inorganic Analysis Multi-media Multi-concentration ILM04.1 Statement of Work (SOW). Results of the sample analyses are reported by the laboratory as either qualified or unqualified. Unqualified results mean that the reported values maybe used without reservation. Various qualifier codes are used by the laboratory to denote specific information regarding the analytical results.

The data validation process is intended to evaluate the data on a technical basis. The data package also was subjected to an internal laboratory quality review prior to submission to Earth Tech for data validation.

During the validation process, laboratory-qualified and unqualified data are verified against all available supporting documentation. Based on this evaluation, qualifier codes may be added, deleted or modified by the data user. Final results are therefore, either qualified or unqualified. Validator-qualified results are annotated with the following codes in accordance with the Functional Guidelines:

- U The constituent was analyzed for, but was not detected above the level of the associated analytical reporting limit. The associated value is either the sample quantitation limit or the sample detection limit.
- J The analyte was positively identified; the associated numerical value is the approximate concentration of the analyte in the sample.
- UJ The analyte was not detected above the reported sample quantitation limit. However, the reported quantitation limit is approximate and may or may not represent the actual limit of quantitation necessary to accurately and precisely measure the analyte in the sample.

R The sample results are rejected due to serious deficiencies in the ability to analyze the sample and meet quality control criteria. The presence or absence of the analyte cannot be verified.

Details of the inorganics data validation findings and conclusions are provided in the following sections of this report:

- 1. Holding Times
- 2. Calibration
 - A. Initial Calibration (IC)
 - B. Continuing Calibration (CC)
- 3. Blanks
- 4. Inductively Coupled Plasma (ICP) Interference Check Sample
- 5. Laboratory Control Sample (LCS)
- 6. Duplicate Analysis
- 7. Spike Sample Analysis
- 8. ICP Serial Dilution
- 9. System Performance
- 10. Documentation
- 11. Overall Assessment

1. HOLDING TIMES

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All samples for inorganics analyses were analyzed within the 180-day holding time for preserved aqueous samples. Mercury analyses were conducted within the 28-day holding time for aqueous samples undergoing CLP protocol. Cyanide analyses were conducted within the 14-day holding time. The cooler temperature upon receipt at the laboratory was within the recommended temperature of 4°C +/- 2°C.

2. CALIBRATION

A. Initial Calibration

The percent recoveries for the Initial Calibration Verification (ICV) standard were within Quality Control (QC) limits for all constituents.

B. Continuing Calibration

The percent recoveries for the Continuing Calibration Verification (CCV) standard were within QC limits for all constituents.

3. BLANKS

The Initial Calibration Blank (ICB), Continuing Calibration Blanks (CCB) and Preparation Elanks (PB) were analyzed at the appropriate frequencies. No constituents were detected in the ICB, CCB, and PB blanks above the corresponding Contract Required Detection Limit (CRDL).

4. ICP INTERFERENCE CHECK SAMPLE

Results for the ICP analysis of the Interference Check Sample (ICS) solution AB were within 20% of the true value.

5. LABORATORY CONTROL SAMPLES

Recoveries were within the control limit (80-120%) for all constituents.

6. DUPLICATE ANALYSIS

The Relative Percent Difference (RPD) between the sample and duplicate results were within the acceptance criteria for all target compounds.

7. SPIKE SAMPLE ANALYSIS

The laboratory used sample SKSWD521008 for the matrix spike sample. The MS percent recoveries were within the acceptance criteria (75%-125%) in the total and dissolved fractions with the exception of Mercury (47%). As per the National Functional Guidelines: if the percent recovery is greater than 30% and less than 74% qualify detected results for that analyte with "J" and non-detected results with "UJ".

8. ICP SERIAL DILUTION

As noted in the National Functional Guidelines: If the analyte concentration is at least 50 times above the IDL, its serial dilution analysis must then agree within 10% of the original determination after corrected for dilution. The serial dilution is performed to determine whether any significant chemical or physical interference's exist due to matrix effects.

The percent differences were within the acceptance criteria for all target analytes with the exception of Zinc. As per the National Functional Guidelines if the percent difference criteria is not met qualify the associated results with "J".

9. SYSTEM PERFORMANCE

The analytical system appears to have been working well at the time of these analyses, based on the evaluation of the raw data.

10. DOCUMENTATION

GCAL qualified the total metal results for Copper and Iron with an "E" qualifier on the Form IX to indicate that the %Difference (%D) between the original results and its serial dilution result exceeded the control limit. The %Differences were actually within the control limit therefore the data validator crossed out the (E) with a single line and dated and initialed the bottom of the report.

11. OVERALL ASSESSMENT

The percent recoveries for Zinc in the Contract Required Detection Limit (CRDL) standards were 78%, and 73%. The detected Zinc results were qualified with a "J" and the non-detected Lead results were qualified with "UJ".

The percent recoveries for Selenium in the Contract Required Detection Limit (CRDL) standards were 128%, and 84%. The detected Selenium results were qualified with a "J".

The results are acceptable with the validator-added qualifiers.

DATA VALIDATION SUMMARY – SAMPLE DELIVERY GROUP 203121507 SEMIVOLATILE ORGANICS

Validation of the Gas Chromatograph/Mass Spectrometer (GC/MS) semi-volatile organics data, as prepared by Gulf Coast Analytical Laboratories (GCAL) for the samples collected from the Skinner Landfill site in November 2003, was conducted by Earth Tech using the National Functional Guidelines for Organic Data Review, (US EPA, October, 1999) as appropriate. These data were reported by GCAL under SDG 203121507.

GCAL#	Sample Description
203121507-01	SKSWD521008
203121507-02	SKSWD52DUP1008

INTRODUCTION

Analyses were performed according to CLP-Organic Analysis Multi-Media, Multi-Concentration CLM04.2 SOW. Results of the sample analyses are reported by the laboratory as either qualified or unqualified. Unqualified results mean that the reported values may be used without reservation. Various data qualifier codes are used by the laboratory to denote specific information regarding the analytical results. The data validation process is intended to evaluate the data on a technical basis. The data package also was subjected to an internal laboratory quality review prior to submission to Earth Tech for data validation.

During the validation process, laboratory-qualified and unqualified data are verified against all available supporting documentation. Based on this evaluation, qualifier codes may be added, deleted or modified by the data user. Final results are therefore, either qualified or unqualified. Validator-qualified results are annotated with the following codes in accordance with the Functional Guidelines:

- U The constituent was analyzed for, but was not detected above the level of the associated analytical reporting limit. The associated value is either the sample quantitation limit or the sample detection limit.
- J The analyte was positively identified; the associated numerical value is the approximate concentration of the analyte in the sample.
- UJ The analyte was not detected above the reported sample quantitation limit. However, the reported quantitation limit is approximate and may or may not represent the actual limit of quantitation necessary to accurately and precisely measure the analyte in the sample.
- R The sample results are rejected due to serious deficiencies in the ability to analyze the sample and meet quality control criteria. The presence or absence of the analyte cannot be verified.

Details of the semivolatile data validation findings and conclusions are provided in the following sections of this report:

- 1. Holding Times
- 2. GC/MS Tuning
- 3. Calibration
 - A. IC
 - B. CC
- 4. Blanks
- 5. System Monitoring Compound Recovery
- 6. MS/MSD
- 7. Internal Standards Performance
- 8. Compound Identification
- 9. Constituent Quantitation and Reported Detection Limits
- 10. System Performance
- 11. Documentation
- 12. Overall Assessment

1. HOLDING TIMES

All samples were initially extracted within the seven-day technical holding time and the five-day VTSR method holding time. The cooler temperature upon receipt at the laboratory was within the recommended temperature of 4°C +/- 2°C.

2. GC/MS TUNING

The samples were analyzed on a single GC/MS system, identified as MSSV2. One decafluorotriphenylphosphine (DFTPP) tune was run representing the shift in which the standards and samples were analyzed. The DFTPP tune is acceptable.

3. CALIBRATION

A. Initial Calibration

One IC dated 12/24/03 was analyzed in support of the semivolatile sample analyses. Documentation of the IC was present in the data package, and the Relative Response Factor (RRF), as well as percent % RSD values were accurately reported for all target compounds. The criteria employed for technical data review purposes are different than those used in the method. The laboratory must meet a minimum RRF of 0.01; however, for data review purposes, a RRF criterion of "greater than or equal to 0.05" is applied to all semi-volatile compounds. The RRF's and the average RRF were within the acceptance criteria specified in the method for all reported analytes. The %RSD's were within the acceptance criteria specified in the method for all target analytes with the exception of 2,4,6-Trichlorophenol (31.0%), 2,4-Dinitrophenol (32.2%), and Diethylphthalate (41.0%). The lowest point of the calibration curve was dropped for Diethylphthalate and the %RSD was recalculated. The recalculated %RSD was 15.1%, which is within the acceptance criteria of less than 30%. Diethylphthalate results less than 50 ppb but greater than the IDL were qualified as estimated with a "J" by the data validator. The highest point of the calibration curve was dropped for 2,4,6-Trichlorophenol and the %RSD was recalculated. The recalculated %RSD was 7.2%, which is within the acceptance criteria of less than 30%. The 2,4,6-Trichlorophenol results greater than 160 ppb will be qualified as estimated with a "J" by the data validator. As per the National Functional Guidelines, if the %RSD is greater than the acceptance criteria of 30% then qualify detected results as estimated with "J".

B. Continuing Calibration

Cone CC dated 12/24/03 was analyzed in support of the semivolatile sample analyses reported in the data submissions. The RRF's for the CC dated 12/24/03 were within the acceptance criteria. The percent difference (%D) between the average RRF's and the CC were within the acceptance criteria.

4. BLANKS

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One laboratory semivolatile method blank was analyzed with this SDG. The results are summarized below.

Method Blank (MB136362)

Di-n-butyl phthalate (1.8 ppb) was detected in the method blank extracted on 12/16/03. The results for Di-n-butyl phthalate less than 18 ppb were qualified with "U" for samples extracted with method blank 136362. Bis (2-Ethylhexyl) phthalate (0.956 J ppb) was also detected in the method blank extracted on 12/16/03. The results for bis (2-Ethylhexyl) phthalate less than 9.56 ppb were qualified with "U" for samples extracted with method blank 136632.

5. SYSTEM MONITORING COMPOUND RECOVERY

All reported semivolatile system monitoring compounds were recovered within acceptable control limits.

6. MATRIX SPIKE/MATRIX SPIKE DUPLICATE (MS/MSD)

There were no samples submitted for MS/MSD analysis during this sampling event.

7. INTERNAL STANDARDS PERFORMANCE

Internal standard areas and retention times were within acceptable limits for the reported semivolatile sample analyses.

8. COMPOUND IDENTIFICATION

All reported semivolatile constituents were correctly identified with supporting chromatograms present in the data package.

9. CONSTITUENT QUANTITATION AND REPORTED DETECTION LIMITS

Constituent quantitations were correctly calculated and reported for semivolatile constituents.

10. SYSTEM PERFORMANCE

The analytical system appears to have been working well at the time of these analyses, based on the evaluation of the raw data submitted for review.

11. DOCUMENTATION

The documentation appeared accurate and in order.

12. OVERALL ASSESSMENT

There was low-level Di-n-butylphthalate and bis (2-Ethylhexyl) phthalate contamination associated with the extraction/analysis of the surface water samples. It should be noted that phthalates are a common laboratory. The presence of Di-n-butylphthalate and bis (2-Ethylhexyl) phthalate was mitigated in all of the groundwater samples. The results are acceptable with the validator-added qualifiers.

DATA VALIDATION SUMMARY – SAMPLE DELIVERY GROUP 203121507 VOLATILE ORGANIC

Validation of the GC/MS volatile organics data, as prepared by Gulf Coast Analytical Laboratories (GCAL) for the samples collected from the Skinner Landfill site in November 2003, was conducted by Earth Tech using the National Functional Guidelines for Organic Data Review, (US EPA, October, 1999), as appropriate. These data were reported by GCAL under SDG 203121507.

GCAL#	Sample Description
203121507-01	SKSWD521008
203121507-02	SKSWD52DUP1008
203121507-03	SKSWD52FB1008
203121507-04	SKSWD52TB1008

INTRODUCTION

Analyses were performed according to CLP-Organic Analysis Low Concentration OLC02.0 SOW. Results of the sample analyses are reported by the laboratory as either qualified or unqualified. Unqualified results mean that the reported values may be used without reservation. Various qualifier codes are used by the laboratory to denote specific information regarding the analytical results. The data validation process is intended to evaluate the data on a technical basis. The data package also was subjected to an internal laboratory quality review prior to submission to Earth Tech for data validation.

During the validation process, laboratory-qualified and unqualified data are verified against all available supporting documentation. Based on this evaluation, qualifier codes may be added, deleted or modified by the data user. Final results are therefore, either qualified or unqualified. Validator-qualified results are annotated with the following codes in accordance with the Functional Guidelines:

- U The constituent was analyzed for, but was not detected above the level of the associated analytical reporting limit. The associated value is either the sample quantitation limit or the sample detection limit.
- J The analyte was positively identified; the associated numerical value is the approximate concentration of the analyte in the sample.
- UJ The analyte was not detected above the reported sample quantitation limit. However, the reported quantitation limit is approximate and may or may not represent the actual limit of quantitation necessary to accurately and precisely measure the analyte in the sample.

R The sample results are rejected due to serious deficiencies in the ability to analyze the sample and meet quality control criteria. The presence or absence of the analyte cannot be verified.

The volatiles data validation findings and conclusions are provided in the following sections of this report:

- 1. Holding Times
- 2. GC/MS Tuning
- 3. Calibration
 - A. IC
 - B. CC
- 4. Blanks
- 5. System Monitoring Compound Recovery
- 6. MS/MSD
- 7. Laboratory Control Sample
- 8. Internal Standards Performance
- 9. Compound Identification
- 10. Constituent Quantitation and Reported Detection Limits
- 11. System Performance
- 12. Documentation
- 13. Overall Assessment

1. HOLDING TIMES

All samples for Volatile Organic Compounds (VOC) analyses were analyzed within the 14-day technical holding time and the 10-day VTSR method holding time. The cooler temperature upon receipt at the laboratory was within the recommended temperature of 4°C +/- 2°C.

2. GC/MS TUNING

All samples were analyzed on a single GC/MS system, identified as MSV2. One bromofluorobenzene (BFB) tune was run. The BFB tune was acceptable.

3. CALIBRATION

A. Initial Calibration

One IC dated 12/16/03 was analyzed on Instrument MSV2 in support of the volatile sample analyses reported in the data submissions. Documentation of the IC standards was present in the data package, and RRF's as well as %RSD values were accurately reported. The criteria employed for technical data review purposes are different than those used in the method. The laboratory must meet a minimum RRF of 0.01; however, for data review purposes, a RRF criterion of "greater than or equal to 0.05" is applied to all volatile compounds. The %RSD's were within the acceptance criteria specified in the method for all target analytes. The RRF's and the average RRF for the IC dated 12/16/03 were within the acceptance criteria specified in the method for all target analytes with the exception of trans-1,2-Dichloroethene, Acetone, and 2-Butanone. As per the National Functional Guidelines, if any initial calibration RRF is less than 0.05, qualify positive results that have acceptable mass spectral identification with "J", using professional judgement, and non-detected analytes as unusable (R). The analyte 1,2-Dichloroethene as reported by GCAL consists of the summation of cis-1,2-Dichloroethene and trans-1,2-Dichloroethene. The RRF for cis-1,2-Dichloroethene were within the acceptance criteria therefore the data validator qualified the total 1,2-Dichloroethene result with "UJ" instead of rejecting the result.

B. Continuing Calibration

One CC dated 12/16/03 was analyzed on instrument MSV2 in support of the volatile sample analyses reported in the data submissions. The percent difference (%D) between the average RRF's and the CC RF's were within the acceptance criteria for all target analytes. The CC RRF's were within the acceptance criteria specified in the method for all target analytes with the exception of trans-1,2-Dichloroethene, Acetone and 2-Butanone. The trans-1,2-Dichloroethene, Acetone and 2-Butanone results were previously qualified under section 3A above.

4. BLANKS

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One laboratory volatile method blank, storage blank, Trip Blank, and a Field Blank were analyzed with this SDG. The results are summarized below.

Method Blank

MB136071 (12/16/03)

Chloroform was detected at a concentration of 0.57 ppb in the method blank analyzed on 12/16/03.

Storage Blank (VHBLK01)

Chlorobenzene (0.63 ppb) and Acetone (1.9 ppb) were detected in the storage blank analyzed on 12/16/03

Trip Blank (SKSWD52TB1008)

There were no target analytes detected in the Trip Blank dated 12/11/03.

Field Blank (SKSWD52FB1008)

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Acetone (16 ppb), Benzene (0.11 ppb), Methylene chloride (30 ppb), and Styrene (0.63 ppb) were detected in the Field Blank collected on 12/11/03.

5. SYSTEM MONITORING COMPOUND RECOVERY

All reported volatile system monitoring compounds were recovered within acceptable control limits for all samples.

6. MATRIX SPIKE/MATRIX SPIKE DUPLICATE

A matrix spike/matrix spike duplicate is not required when analyzing samples under the CLP SOW OLC02.0

7. LABORATORY CONTROL SAMPLE

A LCS/LCS duplicate were analyzed in conjunction with this SDG. Recoveries were within the control limit for all constituents.

8. INTERNAL STANDARDS PERFORMANCE

Internal Standard areas and retention times were within acceptable limits for the reported volatile sample analyses.

9. COMPOUND IDENTIFICATION

All reported VOCs were correctly identified with supporting chromatograms present in the data package.

10. CONSTITUENT QUANTITATION AND REPORTED DETECTION LIMITS

Constituent quantitations were correctly calculated and reported for VOCs.

11. SYSTEM PERFORMANCE

The analytical system appears to have been working well at the time of these analyses, based on the evaluation of the raw data.

12. **DOCUMENTATION**

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The documentation appeared accurate and in order.

13. OVERALL ASSESSMENT

The results are acceptable with the validator-added qualifiers.

DATA VALIDATION SUMMARY - SAMPLE DELIVERY GROUP 203121507 PESTICIDES

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Validation of the Gas Chromatography (GC) pesticides data, as prepared by Gulf Coast Analytical Laboratories (GCAL) for the samples collected from the Skinner Landfill site in November 2003, was conducted by Earth Tech using the National Functional Guidelines for Crganic Data Review, (US EPA, October, 1999), as appropriate. These data were reported by CCAL under SDG 203121507.

GCAL#	Sample Description
203121507-01	SKSWD521008
203121507-02	SKSWD52DUP1008

INTRODUCTION

Analyses were performed according to CLP-Organic Analysis Multi-Media, Multi-Concentration OLM04.2 SOW. Results of the sample analyses are reported by the laboratory as either qualified or unqualified. Unqualified results mean that the reported values may be used without reservation. Various qualifier codes are used by the laboratory to denote specific information regarding the analytical results.

The data validation process is intended to evaluate the data on a technical basis. The data package also was subjected to an internal laboratory quality review prior to submission to Earth Tech for data validation.

During the validation process, laboratory-qualified and unqualified data are verified against all available supporting documentation. Based on this evaluation, qualifier codes may be added, deleted or modified by the data user. Final results are therefore, either qualified or unqualified. Validator-qualified results are annotated with the following codes in accordance with the Functional Guidelines:

- U The constituent was analyzed for, but was not detected above the level of the associated analytical reporting limit. The associated value is either the sample quantitation limit or the sample detection limit.
- J The analyte was positively identified; the associated numerical value is the approximate concentration of the analyte in the sample.
- UJ The analyte was not detected above the reported sample quantitation limit. However, the reported quantitation limit is approximate and may or may not represent the actual limit of quantitation necessary to accurately and precisely measure the analyte in the sample.

R The sample results are rejected due to serious deficiencies in the ability to analyze the sample and meet quality control criteria. The presence or absence of the analyte cannot be verified.

Details of the pesticide data validation findings and conclusions are provided in the following sections of this report:

- 1. Holding Times
- 2. Gas Chromatograph/Electronic Capture Detector (GC/ECD) Instrument Performance Check
- 3. IC
- 4. Calibration Verification
- 5. Blanks
- 6. Surrogate Spikes
- 7. Matrix Spike/Matrix Spike Duplicate (MS/MSD)
- 8. Pesticide Cleanup Checks
- 9. Target Compound Identification
- 10. Constituent Quantitation and Reported Detection Limits
- 11. Documentation
- 12. Overall Assessment

1. HOLDING TIMES

All samples were extracted within the seven-day technical holding time and the five-day VTSR method holding time. The cooler temperature upon receipt at the laboratory was within the recommended temperature of $4^{\circ}C$ +/- $2^{\circ}C$.

2. GC/ECD INSTRUMENT PERFORMANCE CHECK

The Performance Evaluation Mixture (PEM) was analyzed at the correct frequency. Absolute retention times were within limits.

The percent resolution between adjacent peaks was within QC limits for the Pesticide Analyte Resolution Check with the exception of Endosulfan sulfate analyzed 12/01/03 on the confirmation column. There were no target analyte detected in the associated samples therefore data qualification was not warranted.

The percent resolution between adjacent peaks is within QC limits for the Performance Evaluation Mixtures (PEM). The percent breakdown for both 4,4-DDT and Endrin in each PEM was less than 20.0% for both GC columns. The combined percent breakdown for 4,4-DDT and Endrin in each PEM was less than 30.0% for both GC columns.

3. INITIAL CALIBRATION

Individual standard mixtures A and B were analyzed at the correct frequencies and concentrations. The percent resolution criterion was met for Individual standard mixtures A and E.

The Percent Relative Standard Deviation (%RSD) of the calibration factors for each of the single component pesticides was less than 20% with the exception of 4,4'-DDT (21.6%). As per the National Functional Guidelines up to two single component target pesticides (other than the surrogates) per column may exceed the 20.0 percent limit but the %RSD must be less than or equal to 30.0 percent.

The multi-component target compounds were analyzed separately on both columns at a single concentration level. Retention times were determined from a minimum of three peaks.

4. CALIBRATION VERIFICATION

Absolute retention times were within appropriate time retention windows

5. BLANKS

One laboratory method blank was analyzed with this SDG. The results are summarized below.

Method Blank 136076

No constituents were detected above the laboratory-reporting limit. This blank corresponds to all samples extracted on 12/16/03.

6. SURROGATE SPIKES

Decachlorobiphenyl (DCB) and tetrachloro-m-xylene (TCX) surrogate spike recoveries were within the acceptance criteria for all samples.

7. MATRIX SPIKE/MATRIX SPIKE DUPLICATE

There were no samples submitted for MS/MSD analysis during this sampling event.

8. PESTICIDE CLEANUP CHECKS

Recoveries of all pesticides and surrogates were within 80-120% for the lot of Florisil cartridges utilized for pesticide cleanup.

9. TARGET COMPOUND IDENTIFICATION

All reported pesticide data were correctly identified with supporting chromatograms present in the data package.

10. CONSTITUENT QUANTITATION AND REPORTED DETECTION LIMITS

Constituent quantitations were correctly calculated and reported for pesticide constituents.

11. DOCUMENTATION

The documentation appeared accurate and in order.

12. OVERALL ASSESSMENT

The results are acceptable with the validator-added qualifiers.

REFERENCES

US EPA, 1994. National Functional Guidelines for Inorganic Data Review.

US EPA, 1999. National Functional Guidelines for Organic Data Review.